

Service Manual

Stereo Radio Cassette Recorder

Radio Cassette

RX-FT550

Color

(K) Black Type

- Please file and use this Service Manual together with the service manual for Model No. RX-FT550 Order No. MD8901003C1.
- This Service Manual indicates the main differences between; Original RX-FT550 [for (P) mark area] and RX-FT550 (PX).

Area

Country Code	Areas	Color
(PX)	Europe-PX Far East-PX	(K)

CHANGES

■ SPECIFICATIONS

General:

Power Requirement: AC; 120 V, 60 Hz
 Power Consumption: 15 W
 Power Output: 8 W (4 W×2)...RMS (max)

Weight: 7 lbs 4 oz (3.3 kg)
 without batteries

Radio Section:

Sensitivity: FM; 8 μ V/50 mW output
 (−3 dB Limit Sens.)
 AM; 400 μ V/m/50 mW output

Tape Deck Section: TAPE 1 and TAPE 2

Frequency Response: 50~13,000 Hz

Power Requirement: AC; 110~127/200~220/230~250 V,
 50/60 Hz

Power Consumption: 17 W
 Power Output: 8 W (4 W×2)...RMS (max)
 20 W (10 W×2)...PMPO
 3.0 kg without batteries

Weight:

Sensitivity: FM; 6.3 μ V/50 mW output
 (−3 dB Limit Sens.)
 AM; 250 μ V/m/50 mW output

Frequency Response: 50~12,000 Hz

■ PARTS COMPARISON TABLE

Notes: 1. Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

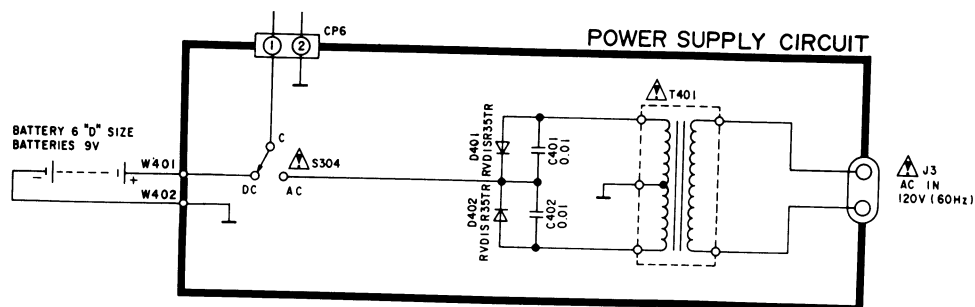
2. $\square$ Indicates parts that are supplied by MESA.

Ref. No.	Description	Part Number		Remarks
		RX-FT550 (P) (Original)	RX-FT550 (PE) (PX)	
TRANSFORMERS				
T401 ⚠	POWER TRANSFORMER [M]	RLT5K3C10A-X	RLT5K3X10A-X	
SWITCH				
S402 ⚠	SW, VOLTAGE SELECTOR	—	RSR3A01ZA-H	Added
CABINET AND CHASSIS				
17	REAR CABINET ASS'Y [M]	RYFXFT550PKS	RYFXFT550PX	
54	P.C.B. [M]	RUP2528YAC	RUP2528WAC	
ACCESSORIES				
A1 ⚠	POWER CORD	RJA22X	RJA21ZC-K	

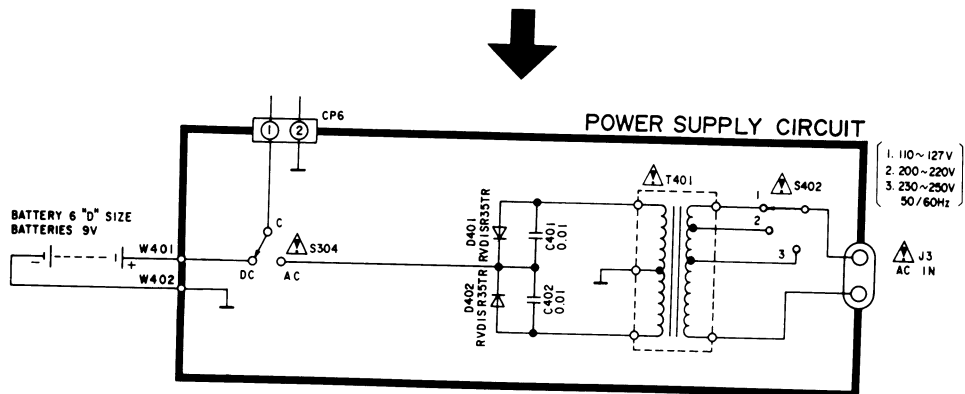
Panasonic®

Matsushita Electric Industrial Co., Ltd.
 Central P.O. Box 288, Osaka 530-91, Japan

SCHEMATIC DIAGRAM

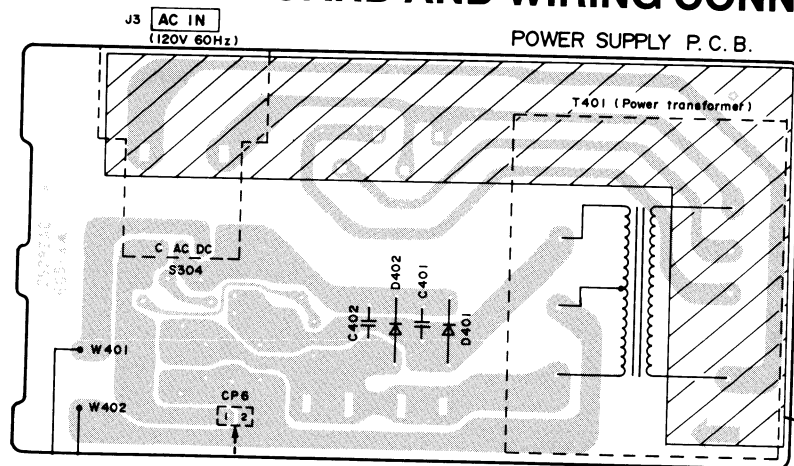


RX-FT550 (P) (Original)



RX-FT550 (PX)

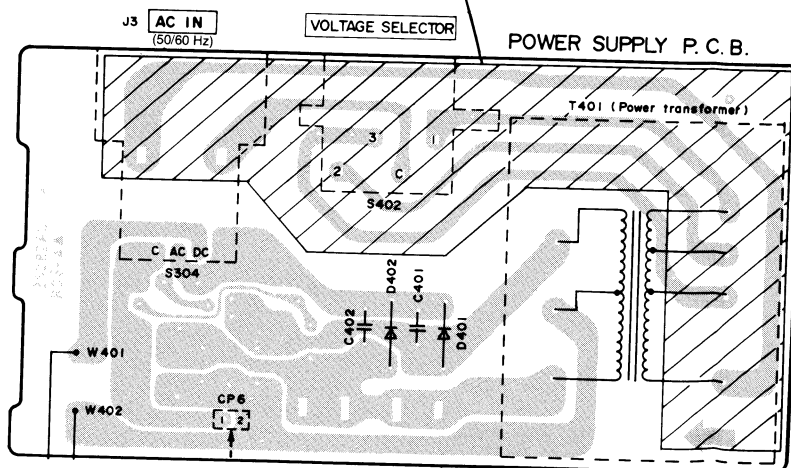
CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



RX-FT550 (P) (Original)

CAUTION
RISK OF ELECTRIC SHOCK
AC voltage line. Please do not
touch this portion.

RX-FT550 (PX)



Service Manual

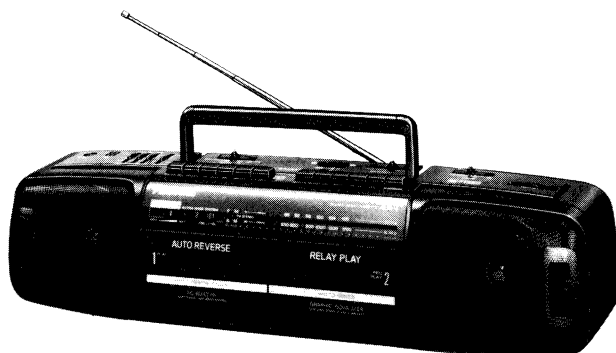
Radio Cassette

RX-FT550

Stereo Radio Cassette Recorder

Color

(K) Black Type



Area

Country Code	Area	Color
(P)	U.S.A.	(K)

RX-FW29 MECHANISM SERIES

■ SPECIFICATIONS

General:

Power Requirement: AC; 120 V, 60 Hz
Battery; 9 V (Six UM-1 "D" Size Batteries)

Power Consumption: 15 W

Power Output: 8 W (4 W×2)...RMS (max.)

Speaker: Woofer; 4" (10 cm) PM Dynamic
Speaker (2.7Ω)
Tweeter; 3/16" (1.5 cm)

Jacks: Input; CD/LINE IN; 398 mV, 47 kΩ
Output; HEADPHONES; 32Ω, Ø3.5

Dimensions: 21 7/8" (W)×5 7/8" (H)×5 3/4" (D)
(556×150×146 mm)

Weight: 6 lbs 10 oz (3.0 kg) without batteries

Radio Section:

Radio Frequency Range: FM; 88~108 MHz
AM; 525~1705 kHz

Intermediate Frequency: FM; 10.7 MHz
AM; 455 kHz

Sensitivity: FM; 8 μV/50 mW output
(-3 dB Limit Sens)
AM; 400 μV/m/50 mW output

Tape Deck Section:

Frequency Response: 50~13,000 Hz

Tape Speed: 1 7/8 ips (4.8 cm/s)

Track System: 4-track 2-channel stereo playback

Tape Deck Section:

Frequency Response: 50~13,000 Hz

Recording System: AC bias, Magnet erase

Tape Speed: 1 7/8 ips (4.8 cm/s)

Track System: 4-track 2-channel stereo recording and playback

Weights and dimensions shown are approximate.
Design and specifications are subject to change without notice.

Panasonic®

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SAFETY PRECAUTIONS

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

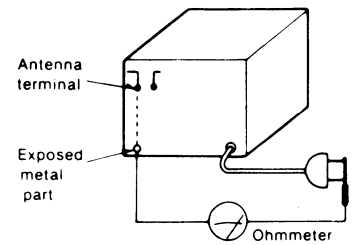


Fig. 1

Resistance = $3\text{ M}\Omega - 5.2\text{ M}\Omega$

INSULATION RESISTANCE TEST

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3\text{ M}\Omega$ and $5.2\text{ M}\Omega$ to all exposed parts*. (Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. 2)
 *Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

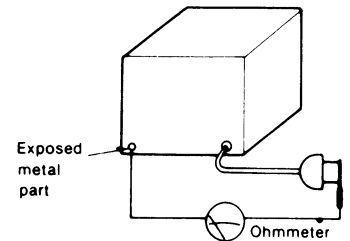
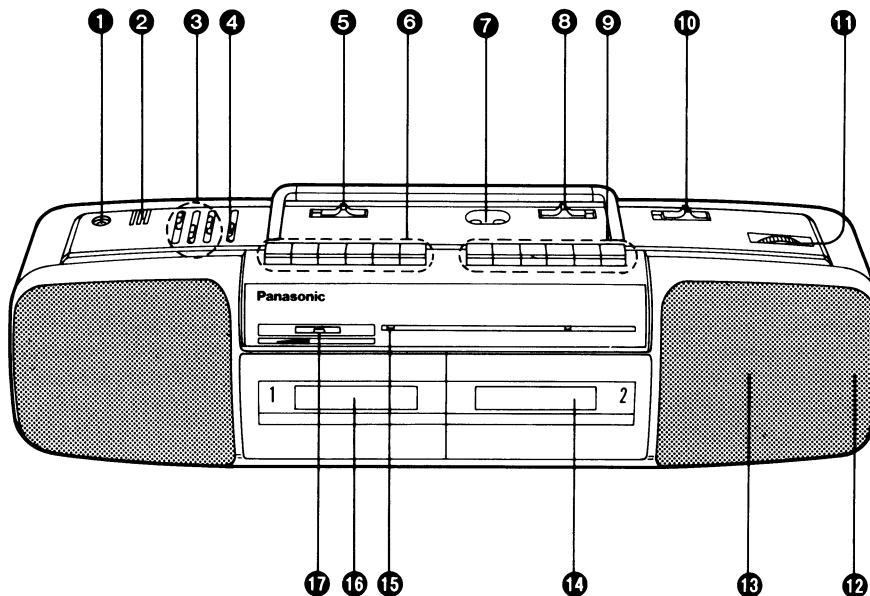


Fig. 2

Resistance = Approx ∞

LOCATION OF CONTROLS AND COMPONENTS



- ① Headphones Jack (PHONES) ($\varnothing 3.5$, 32Ω)
- ② Built-in Microphone (MIC)
- ③ Graphic Equalizer Controls (GRAPHIC EQUALIZER)
- ④ Volume Control (VOLUME)
- ⑤ Function Selector (SELECTOR)

⑥ Tape 1 (For Playback)

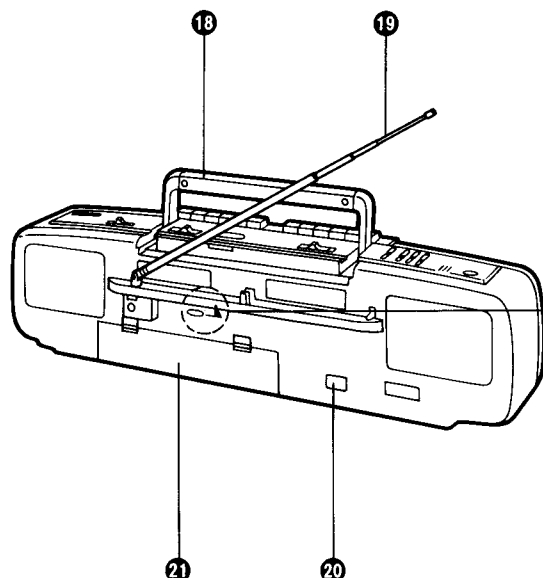
- Direction Button ($\leftarrow \rightarrow$ DIR)
- Stop/Eject Button ($\square$ STOP/EJECT)
- Fast Buttons ($\leftarrow \leftarrow$ —FAST— $\rightarrow \rightarrow$)
- Playback Button ($\blacktriangleleft$ PLAY)
- Tape 1 Reverse Mode Selector (REV MODE)

- ⑦ CD/Line Input Jacks ($\square$ CD/LINE IN) (398mV , $47\text{K}\Omega$)
- ⑧ Editing Mode/Beat Proof Selector (EDITING/B.P)

⑨ TAPE 2 (For Recording and Playback)

- Pause Button ($\parallel$ PAUSE)
- Stop/Eject Button ($\square$ STOP/EJECT)
- Fast Forward Button ($\blacktriangleleft \blacktriangleleft$ FF)
- Rewind Button ($\triangleright \triangleright$ REW)
- Playback Button ($\blacktriangleleft$ PLAY)
- Record Button ($\bullet$ RECORD)

- ⑩ Band Selector (BAND)
- ⑪ Tuning Control (TUNING)
- ⑫ Speakers (Tweeter) (1.5 cm)
- ⑬ Speakers (Woofer) (10 cm, 2.7Ω)
- ⑭ Tape 2 Cassette Compartment
- ⑮ FM Stereo Indicator (FM STEREO)
- ⑯ Tape 1 Cassette Compartment
- ⑰ XBS Level Control (XBS LEVEL)



- 18 Handle
- 19 Telescopic Antenna
- 20 AC Socket (AC IN~)
- 21 Battery Compartment

When the tape is caught in the pinch roller, etc. Release the tape by turning the pulley on the motor with the screwdriver in the direction of the arrow.

BATTERY SERVICE LIFE

UM-1 (D-size) Batteries

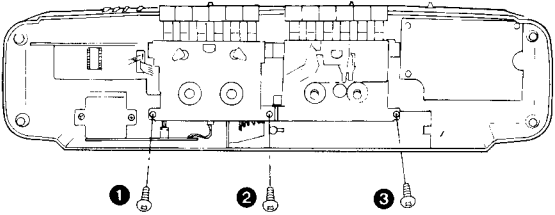
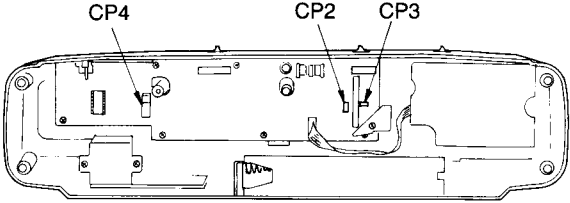
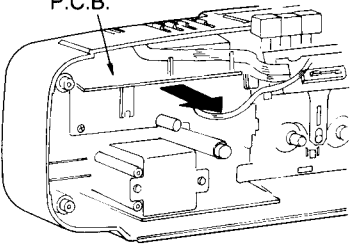
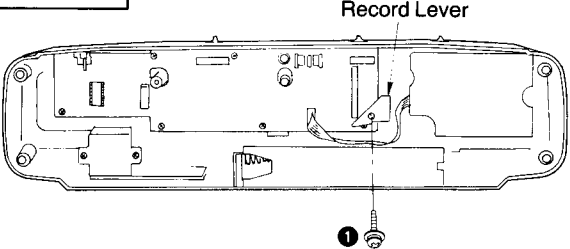
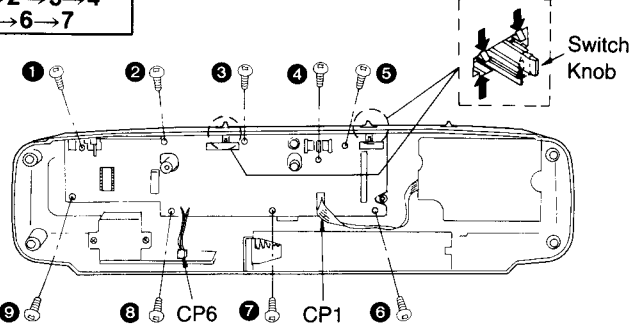
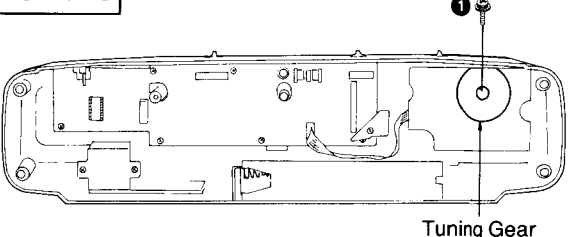
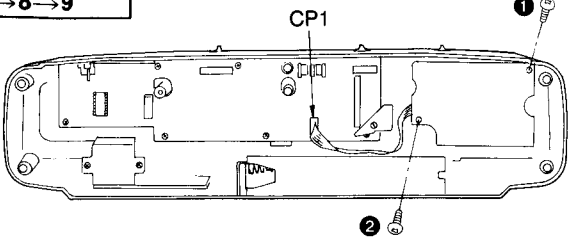
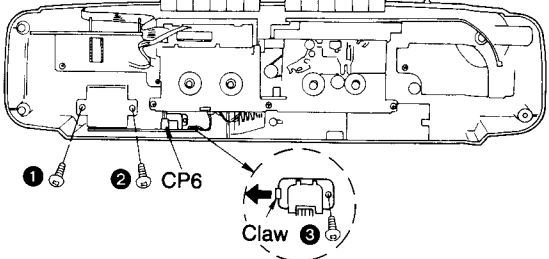
Approx. 24 hours of recording (EIAJ)

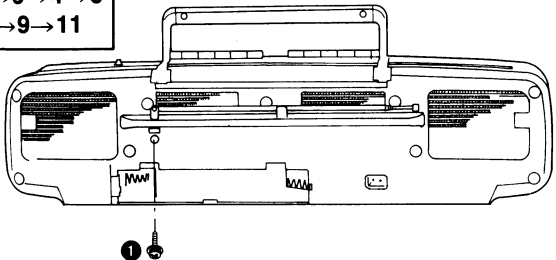
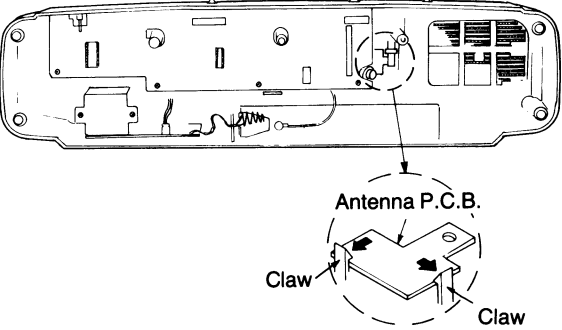
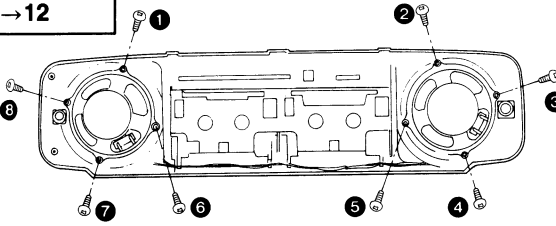
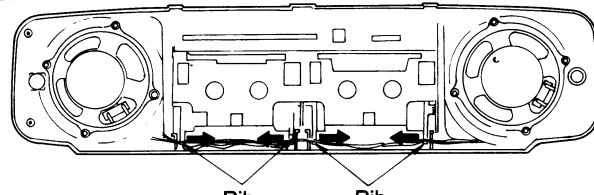
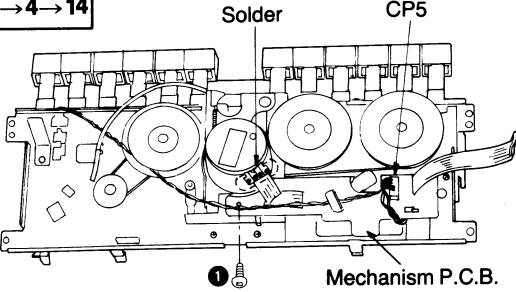
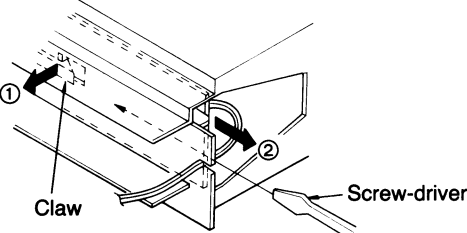
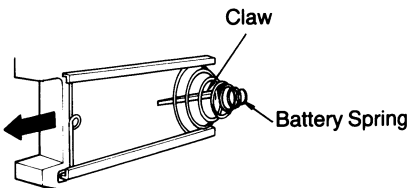
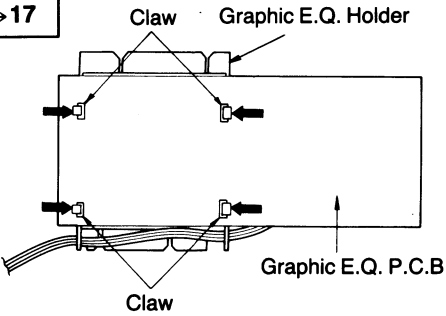
Approx. 14.5 hours of playback (EIAJ) with volume set at $\frac{3}{4}$ position

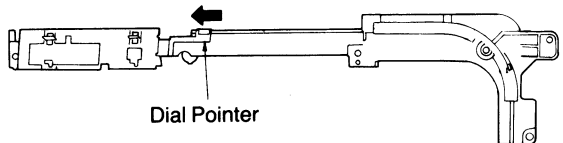
The above battery service life is measured according to the conditions set forth by EIAJ (Electronic Industries Association of Japan). As the battery service life varies with the method of operation and environmental conditions, use these values as reference.

DISASSEMBLY INSTRUCTIONS

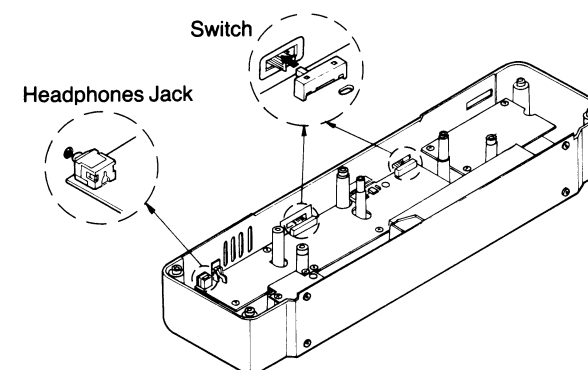
Ref. No. 1	Removal of the Front Cabinet	Ref. No. 2	Removal of the XBS P.C.B.
Procedure 1	1. Remove the battery cover. 2. Remove 8 screws (1~8). TAPE 1 STOP/EJECT BUTTON TAPE 2 STOP/EJECT BUTTON 3. Remove the XBS level control knob. 4. Press the STOP/EJECT button. 5. Remove the connector (CP7).	Procedure 1→2	1. Remove 2 claws in the direction of arrows. 2. Remove the connector (CP9).
Ref. No. 3	Removal of the Dial Chassis		
Procedure 1→2→3	• Remove 2 screws (1, 2).		

Ref. No. 4	Removal of the Mechanism	
Procedure 1→2→3→4		
		1. Remove 3 screws (①~③).
		
Ref. No. 5	Removal of the Graphic Equalizer P.C.B.	Ref. No. 6
Procedure 1→2→5	Graphic Equalizer P.C.B.	Ref. No. 6
		Procedure 1→2→3→4→6
		
Ref. No. 7	Removal of the Main P.C.B.	Ref. No. 8
Procedure 1→2→3→4→6→7		Ref. No. 8
		Procedure 1→2→3→4→8
		
Ref. No. 9	Removal of the Tuner P.C.B.	Ref. No. 10
Procedure 1→2→3→4→8→9		Ref. No. 10
		Procedure 1→10
		

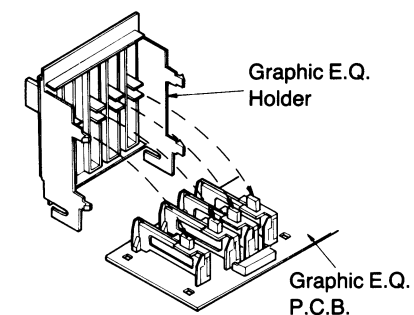
Ref. No. 11	Removal of the Antenna P.C.B.	 1. Remove the Screw (1).  2. Remove 2 claws.	
Procedure 1→2→3→4→6 →8→9→11			
Ref. NO. 12	Removal of the Speaker	Ref. No. 13	Removal of the Cassette Compartment
Procedure 1→12	 •Remove 8 screws (1~8).	 •Remove 4 ribs in the direction of arrows.	
Ref. No. 14	Removal of the Mechanism P.C.B.	Ref. No. 15	Removal of the Battery P.C.B.
Procedure 1→2→3→4→14  1. Remove the solder. 2. Remove the connector (CP5). 3. Remove the screw (1).		 •Remove the claw in the direction of arrow ① and then remove the battery P.C.B. in the direction of arrow ②.	
Ref. No. 16	Removal of the Battery Spring	Ref. No. 17	Removal of the Graphic E.Q. Holder
Procedure 16  1. Remove the claw and then remove the battery spring in the direction of arrow.		 •Remove 4 claws in the direction of arrows.	

Ref. No. 18	Removal of the Dial Pointer
Procedure 1→2→3→18	 •Remove the dial pointer in the direction of arrow.

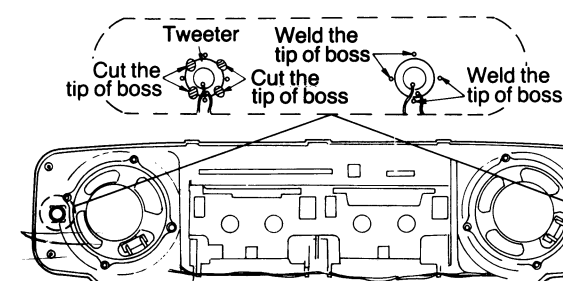
■ MAIN P.C.B. ASSEMBLY



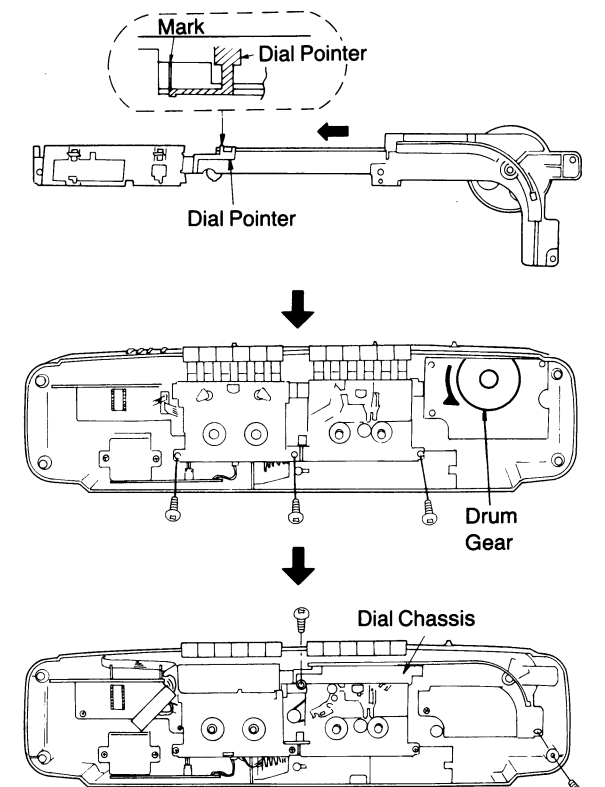
■ GRAPHIC E.Q. HOLDER ASSEMBLY



■ TWEETER DISASSEMBLY AND ASSEMBLY



■ DIAL CHASSIS ASSEMBLY



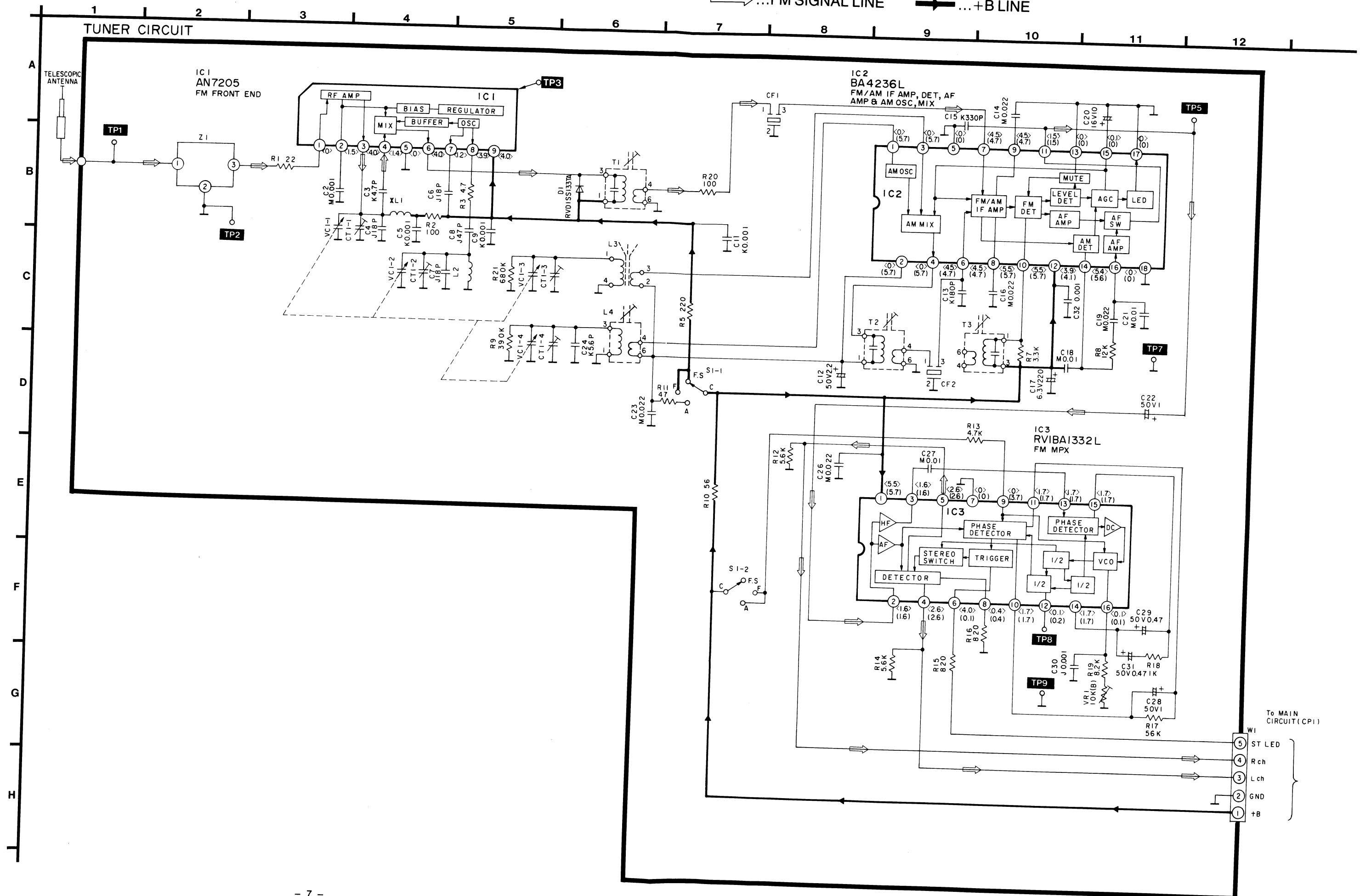
SCHEMATIC DIAGRAM • TUNER CIRCUIT

RX-FT550

RX-FT550

→ ...FM SIGNAL LINE

→ ...+B LINE

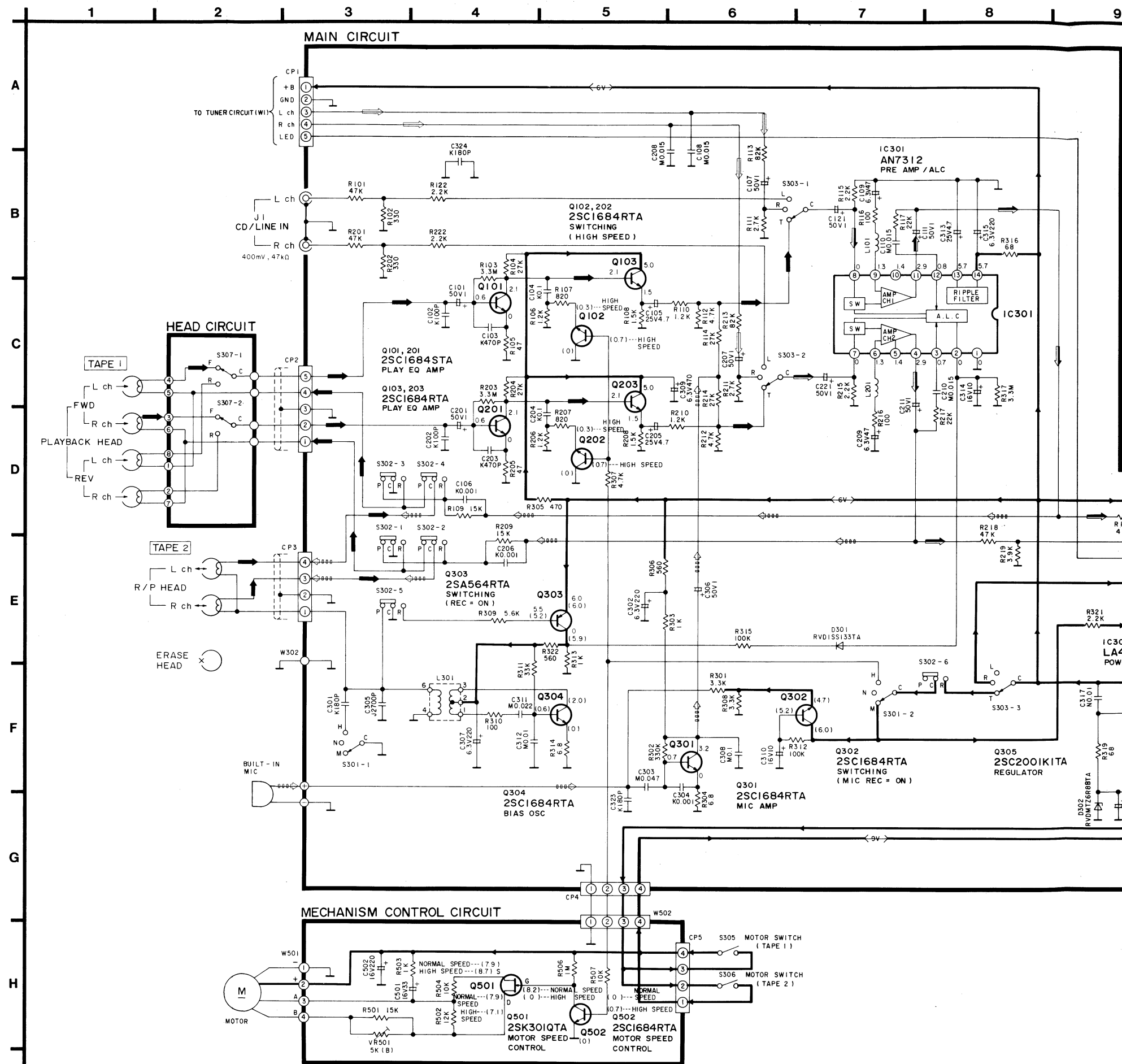
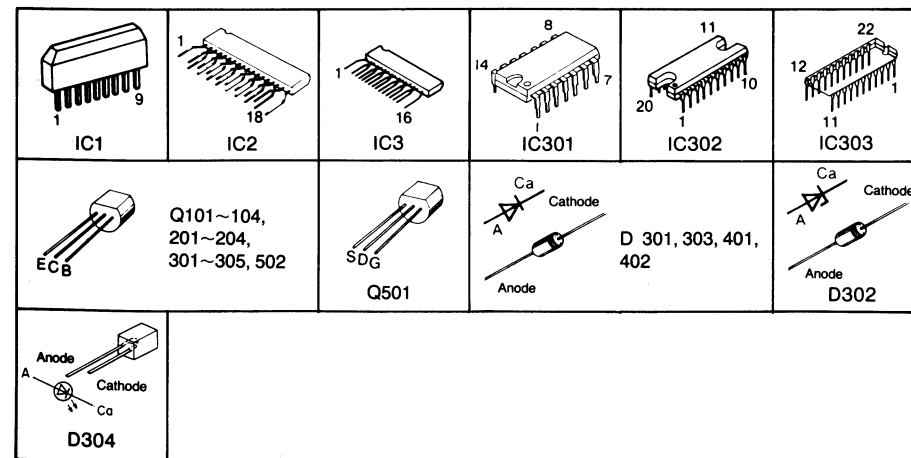


SCHEMATIC DIAGRAM • MAIN, HEAD, GRAPHIC E.Q., XBS and POWER CIRCUIT

Notes:

1. S1-1, S1-2: Band select switch in "FM STEREO" position.
(F.S...FM STEREO, F...FM, A...AM)
2. S301-1, S301-2: Editing mode/Beat proof select switch in "Built-in MIC/ " position.
(M...Built-in MIC/ , N...NORMAL/ , H...HIGH/)
3. S302-1~S302-6: Record/Playback switch in "PLAYBACK" position.
(P...PLAYBACK, R...RECORD)
4. S303-1~S303-4: Function selector switch in "TAPE/POWER OFF" position.
(T...TAPE/POWER OFF, R...RADIO, L...CD/LINE IN)
5. S304: AC/DC select switch.
6. S305: Tape 1 motor switch.
7. S306: Tape 2 motor switch.
8. VR1: FM VCO adjustment VR.
9. VR101: Graphic equalizer (10 kHz) control VR (Rch).
10. VR102: Graphic equalizer (1 kHz) control VR (Rch).
11. VR103: Graphic equalizer (330 Hz) control VR (Rch).
12. VR104: Volume control VR (Rch).
13. VR105: XBS level control VR (Rch).
14. VR201: Graphic equalizer (10 kHz) control VR (Lch).
15. VR202: Graphic equalizer (1 kHz) control VR (Lch).
16. VR203: Graphic equalizer (330 Hz) control VR (Lch).
17. VR204: Volume control VR (Lch).
18. VR205: XBS level control VR (Lch).
19. VR501: Tape speed adjustment VR.
20. DC voltage measurements are taken with electronic voltmeter.
The negative terminal of the battery provides negative meter connection point.
No mark...PLAYBACK, ()...RECORD,
< >...FM, ()...AM
21. Battery current: Vol. min. 96 mA (Radio)
160 mA (Tape Playback)
Vol. max 840 mA (Radio)
975 mA (Tape Playback)
Measurement instruction
(Radio: FM 60 dB, 30% Mod.)
(Tape: 315 Hz, 0dB)
22. Important safety notice
Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
23. The mark $\blacksquare$ shows test point e.g. TP1 = test point 1.

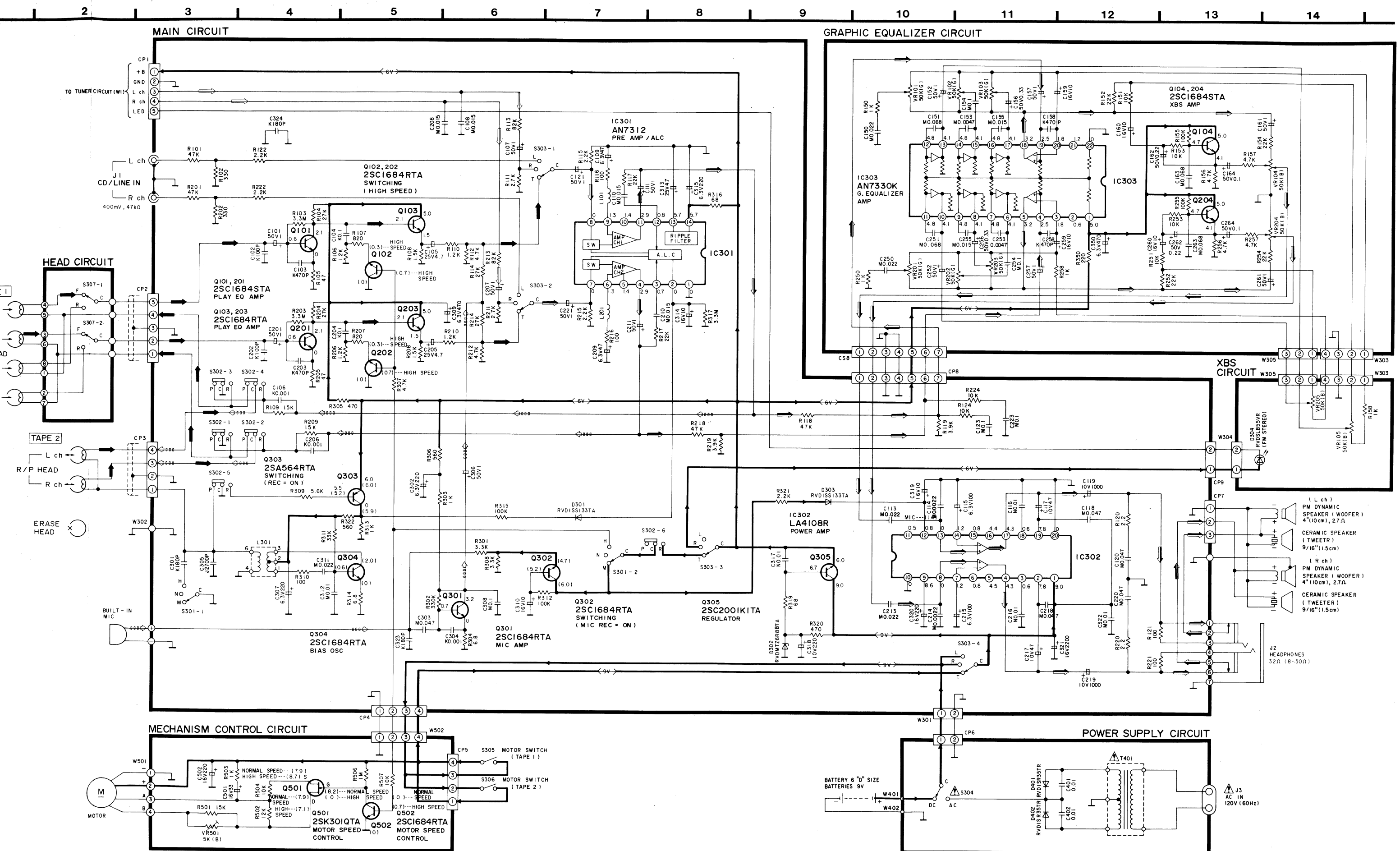
• This schematic diagram may be modified at any time with the development of new technology.



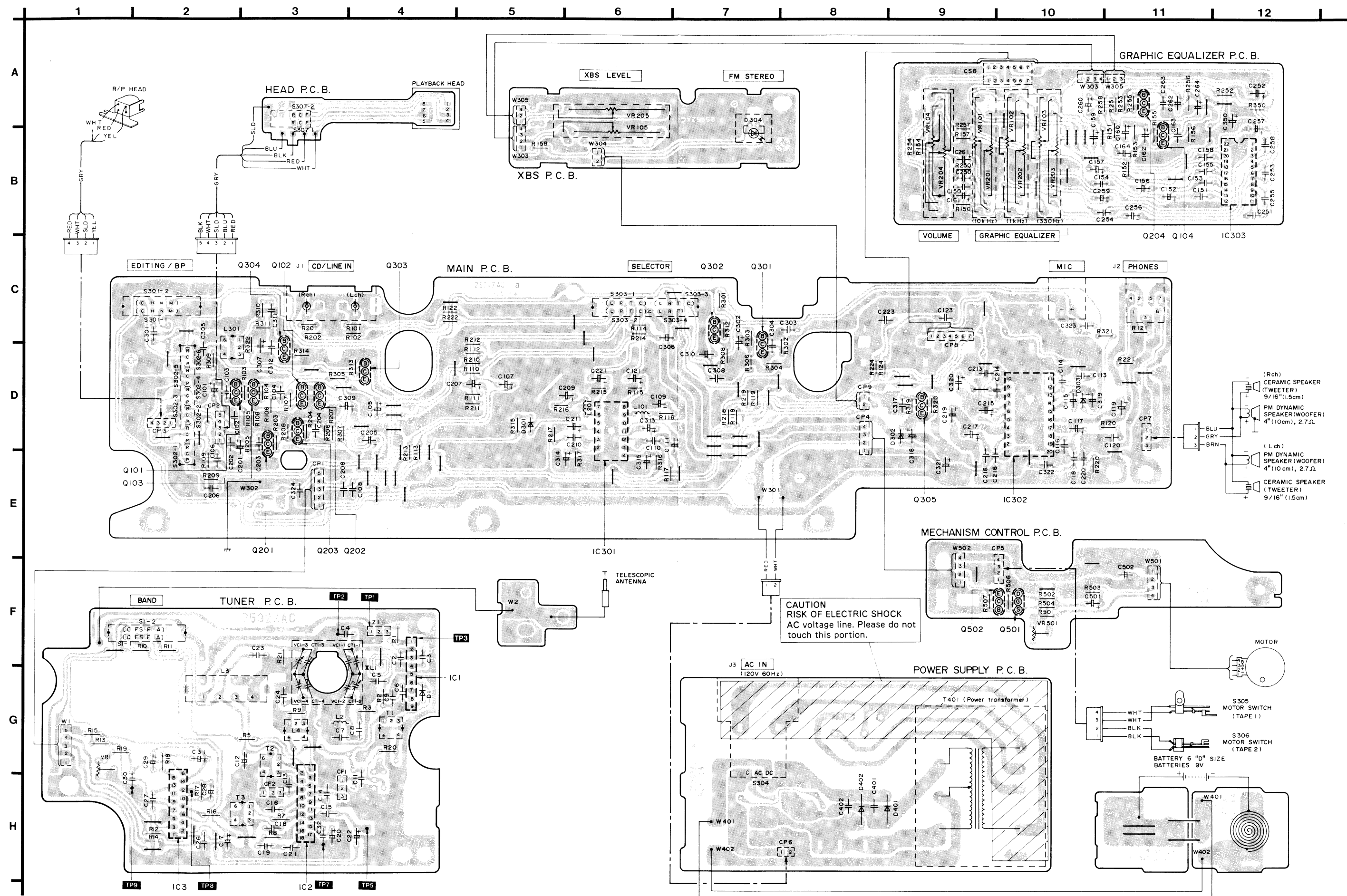
WIRING DIAGRAM • MAIN, HEAD, GRAPHIC E.Q., XBS and POWER CIRCUIT

→ ...PLAYBACK SIGNAL LINE
 → ...PLAYBACK/FM SIGNAL LINE

□□□ ...RECORD SIGNAL LINE
 → ...+B LINE
 → ...FM SIGNAL LINE



CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



MEASUREMENT

■ ALIGN

1. Set
2. Set
3. Set
4. Set

■ AM-FM

CONNECTION

Fashion several and radio loop

■ AM-FM

Fashion several and radio loop

(*1) F

■ FM-FM

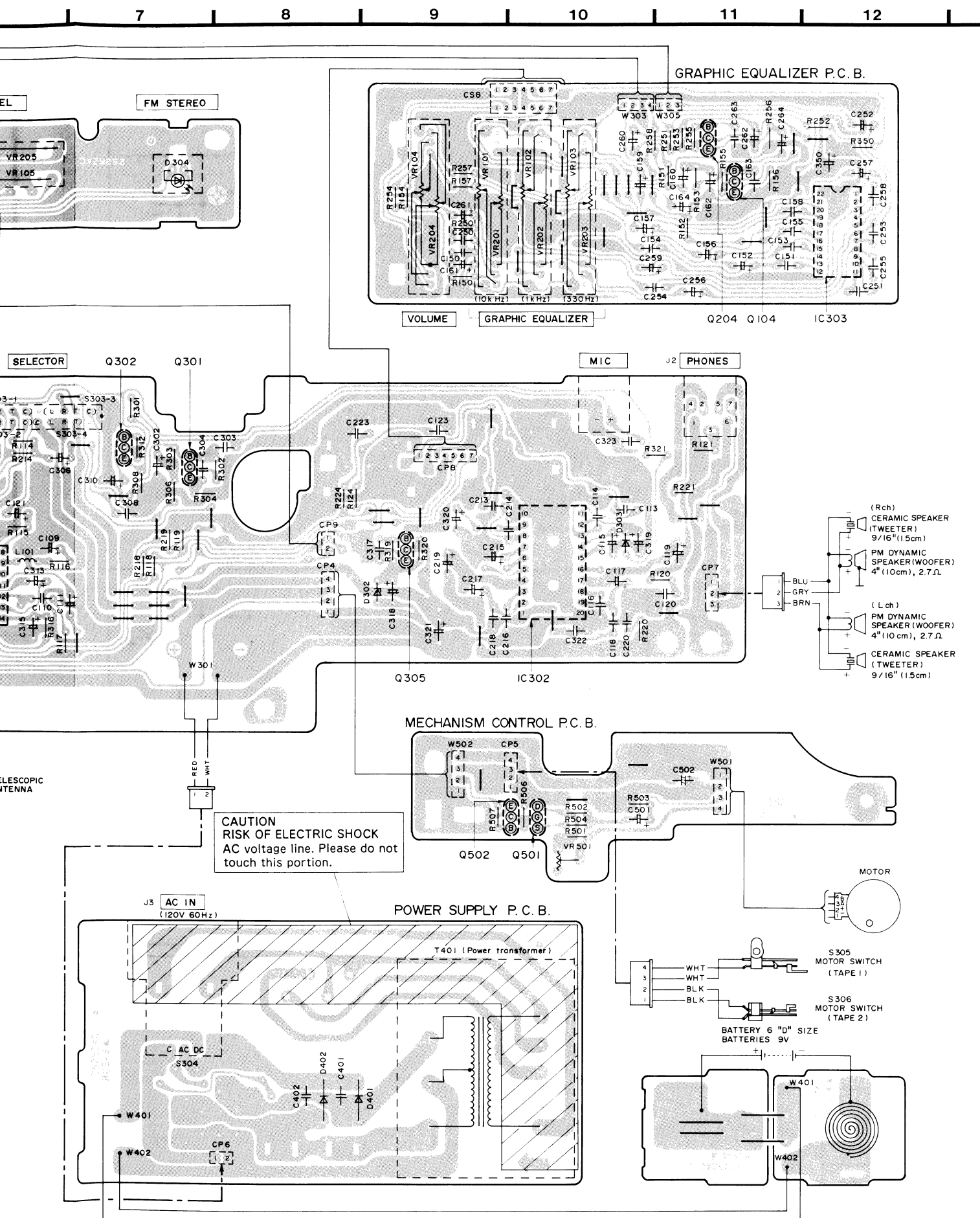
CONNECTION

Connected TP3 the capacitor Negative point T

■ FM-FM

Connected TP1 the dummy Negative point T

(*2) T



MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

1. Set volume control to maximum.
2. Set FM mode selector switch to FM ST.
3. Set band switch to AM or FM.
4. Set function selector to RADIO or TAPE.
5. Set power source voltage to 9 V DC.
6. Set G.E.Q. control to center.
7. Output of signal generator should be no higher than necessary to obtain an output reading.

■ AM-IF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	455 kHz 30% Mod. at 400 Hz	Point of non-interference. (on/about 600 kHz)	Headphones Jack (32Ω) (Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.)	T2 (AM IFT)	Adjust for maximum output.

■ AM-RF ALIGNMENT

Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	511 kHz	Tuning capacitor fully closed.	"	L4 (AM OSC Coil)	Adjust for maximum output.
"	1,753 kHz	Tuning capacitor fully open.	"	CT1-3 (AM OSC Trimmer)	"
"	600 kHz	Tune to signal	"	(*1) L3 (AM ANT Coil)	Adjust for maximum output. Adjust L3 by moving coil along the ferrite core.
"	1,500 kHz	"	"	CT1-4 (AM ANT Trimmer)	Adjust for maximum output.

(*1) Fix antenna coil with wax after completing alignment.

■ FM-IF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT	REMARKS
CONNECTIONS	FREQUENCY				
Connect to test point TP3 through ceramic capacitor (0.001 μF). Negative side to test point TP2 .	10.7 MHz (SWEEP)	Point of interference (on/about 90 MHz)	Connect vert. amp. scope to test point TP5 . Negative side to test point TP7 .	T1 (FM 1st)	Adjust for maximum amplitude. (Refer to Fig. 3.)
"	"	"	"	T3 (FM 2nd)	Adjust for maximum amplitude. (Refer to Fig. 4.)

■ FM-RF ALIGNMENT

Connect to test point TP1 through FM dummy antenna. Negative side to test point TP2 .	86.2 MHz	Variable capacitor fully closed.	Headphones Jack (32Ω) (Fabricate the plug as shown in Fig. 2. and then connect the lead wires of the plug to the measuring instrument.)	L2 (FM OSC coil)	(*2) Adjust for maximum output.
"	109.2 MHz	Variable capacitor fully open.	"	CT1-2 (FM OSC Trimmer)	"
"	106 MHz	Tune to signal	"	CT1-1 (FM ANT Trimmer)	"

(*2) Three output responses will be present; proper tuning is the center frequency.

■ SEPARATION ALIGNMENT

FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
98 MHz, 60 dB (CW) Connect to test point TP1 through FM dummy antenna. Negative side to TP2 .	TP8 ... (+) TP9 ... (-)	VR1	19 kHz	Adjust VR1, for 19 kHz ± 50 Hz reading on frequency counter.

■ HEAD AZIMUTH ALIGNMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
QZZCFM (8 kHz, -20 dB)	Headphones Jack (32 Ω) (Fabricate the plug as shown in Fig. 2, and then connect the lead wires of the plug to the measuring instrument.)	Azimuth screw (Shown in Fig. 6)	Maximum output	● Playback mode.

■ TAPE SPEED ADJUSTMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	REMARKS
QZZCWAT (3 kHz)	Headphones Jack (32 Ω) (Fabricate the plug as shown in Fig. 2, and then connect the lead wires of the plug to the measuring instrument.)	VR501 (Shown in Fig. 5)	Normal Speed Adjustment 1. Insert a test tape (QZZCWAT) in Tape 2 and play it back. 2. Adjust VR501 until the measured value becomes 3000 ± 30 Hz. 3. Check Tape 1 in the same way to make sure it satisfies the specification. Tape 1... ± 20 % Hz of the speed of Tape 2. If it doesn't repeat steps 1 and 2 above. Note: This set uses one drive motor, so be sure to perform the adjustment in Tape 2. High Speed Measurement 4. Insert the playback tape into Tape 1 and the editing tape into Tape 2. 5. Set the Editing Mode Selector to the "HIGH" position. 6. Press the Tape 2 Pause button, then press the Record Button. 7. Press the Tape 1 Playback Button. ● Editing is started by means of the Synchro-Start function. 8. Check to be sure that the measured speed is at least 1.7 times faster than normal speed.

■ ALIGNMENT POINT

• Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

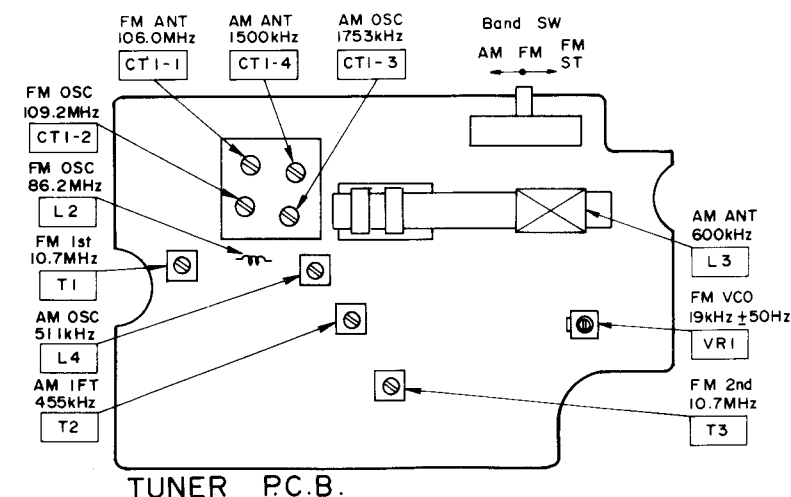


Fig. 1

MECHANISM CONTROL P.C.B

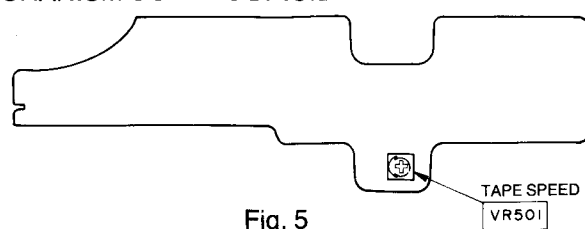


Fig. 5

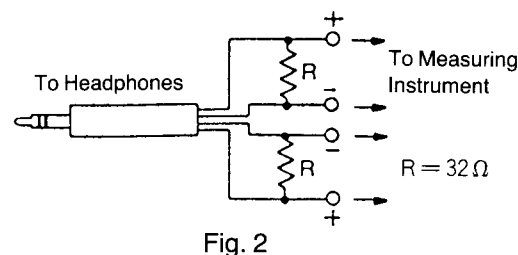


Fig. 2

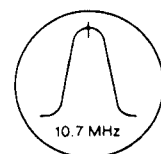


Fig. 3

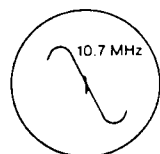


Fig. 4

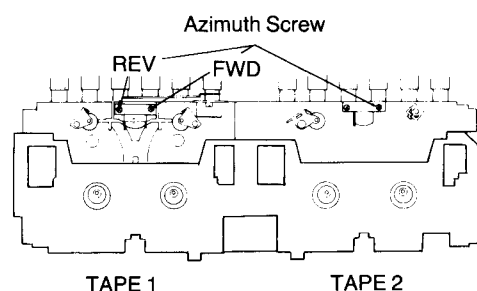


Fig. 6

■ RESISTORS & CAPACITORS

Notes : * Important safety notice :

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area. (Refer to the first page for area.)

Parts without these indications can be used for all areas.

Numbering System For Resistors

Example:

ERD	25	F	J	102
Type	Wattage (1/4W)	Shape	Tolerance	Value (1K Ω)
ERX	2	AN	J	471
Type	Wattage (2W)	Shape	Tolerance	Value (470 Ω)

Numbering System For Capacitors

Example:

ECKD	1H	102	Z	F
Type	Voltage (50V)	Value (0.001 μ F)	Tolerance	Unique
ECEA	50	M		330
Type	Voltage (50V)	Characteristics		Value (33 μ F)

● Capacity values are in microfarads (μ F) unless specified otherwise, P = Pico-farads (pF) F = Farads (F).

● Resistance values are in ohms (Ω), unless specified otherwise, 1K = 1,000 Ω , 1M = 1,000k Ω .

Resistor Type	Wattage	Tolerance
ERD : Carbon	10 : 1/8W 12 : 1/2W	J : $\pm 5\%$
ERG : Metal Oxide	14 : 1/4W 25 : 1/4W	F : $\pm 1\%$
ERQ : Fuse Type Metal	1A : 1W 18 : 1/8W	G : $\pm 2\%$
ERX : Metal Film	S2 : 1/4W S1 : 1/2W	J : $\pm 5\%$
ERD L : Carbon (chip)	2F : 1/4W 50 : 1/2W	K : $\pm 10\%$
ERO K : Metal Film (chip)	2A : 2W 3A : 3W	M : $\pm 20\%$
ERC : Solid	6G : 1/10W 8G : 1/8W	
ERF : Incombustible Box-Shaped		
ERM : Wire-Wound		
RRJ : Chip Resistor		
ERJ : Chip Resistor		

Capacitor Type	Voltage	Tolerance
ECE : Electrolytic	0J : 6.3V 1A : 10V	K : $\pm 10\%$
ECCD : Ceramic	1C : 16V 1E : 25V	M : $\pm 20\%$
ECKD : Ceramic Capacitor	1H : 50V 1V : 35V	Z : $\pm 80\%$
ECQM : Polyester	50 : 50V 05 : 50V	J : $\pm 5\%$
ECQP : Polypropylene	2H : 500V 2A : 100V	G : $\pm 2\%$
ECG : Ceramic	1 : 100V 1J : 63V	F : $\pm 1\%$
ECEA N : Non Polar Electrolytic	KC : 400V AC	C : $\pm 0.25\mu$ F
OCU : Ceramic (Chip Type)	KC : 125V AC (UL)	D : $\pm 0.5\mu$ F
ECUX : Ceramic (Chip Type)		
ECF : Semiconductor		
EECW : Liquid electrolyte double layer capacitor		

Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.
RESISTORS(VALUE, WATTAGE)								
R1	ERDS2TJ220T	22 1/4	R122	ERDS2TJ222	2.2K 1/4	R258	ERDS2TJ102	1K 1/4
R2	ERDS2TJ101	100 1/4	R124	ERDS2TJ103	10K 1/4	R301	ERDS2TJ332	3.3K 1/4
R3	ERDS2TJ4R7	4.7 1/4	R150	ERDS2TJ102	1K 1/4	R302	ERDS2TJ334	330K 1/4
R5	ERDS2TJ221	220 1/4	R151	ERDS2TJ103	10K 1/4	R303	ERDS2TJ102	1K 1/4
R7	ERDS2TJ332	3.3K 1/4	R152	ERDS2TJ223	22K 1/4	R304	ERDS2TJ6R8T	6.8 1/4
R8	ERDS2TJ123	12K 1/4	R153	ERDS2TJ103	10K 1/4	R305	ERDS2TJ471	470 1/4
R9	ERDS2TJ394	390K 1/4	R154	ERDS2TJ223	22K 1/4	R306	ERDS2TJ561	560 1/4
R10	ERDS2TJ560T	56 1/4	R155	ERDS2TJ104	100K 1/4	R307	ERDS2TJ472	4.7K 1/4
R11	ERDS2TJ470	47 1/4	R156	ERDS2TJ472	4.7K 1/4	R308	ERDS2TJ332	3.3K 1/4
R12	ERDS2TJ562	5.6K 1/4	R157	ERDS2TJ472	4.7K 1/4	R309	ERDS2TJ562	5.6K 1/4
R13	ERDS2TJ472	4.7K 1/4	R158	ERDS2TJ102	1K 1/4	R310	ERDS2TJ101	100 1/4
R14	ERDS2TJ562	5.6K 1/4	R201	ERDS2TJ473	47K 1/4	R311	ERDS2TJ333	33K 1/4
R15	ERDS2TJ821	820 1/4	R202	ERDS2TJ331	330 1/4	R312	ERDS2TJ104	100K 1/4
R16	ERDS2TJ821	820 1/4	R203	ERDS2TJ335T	3.3M 1/4	R313	ERDS2TJ102	1K 1/4
R17	ERDS2TJ563	56K 1/4	R204	ERDS2TJ273	27K 1/4	R314	ERDS2TJ6R8T	6.8 1/4
R18	ERDS2TJ102	1K 1/4	R205	ERDS2TJ470	47 1/4	R315	ERDS2TJ104	100K 1/4
R19	ERDS2TJ822	8.2K 1/4	R206	ERDS2TJ122	1.2K 1/4	R316	ERDS2TJ680	68 1/4
R20	ERDS2TJ101	100 1/4	R207	ERDS2TJ821	820 1/4	R317	ERDS2TJ335T	3.3M 1/4
R21	ERDS2TJ684	680K 1/4	R208	ERDS2TJ152	1.5K 1/4	R319	ERDS2TJ680	68 1/4
R101	ERDS2TJ473	47K 1/4	R209	ERDS2TJ153	15K 1/4	R320	ERDS2TJ471	470 1/4
R102	ERDS2TJ331	330 1/4	R210	ERDS2TJ122	1.2K 1/4	R321	ERDS2TJ222	2.2K 1/4
R103	ERDS2TJ335T	3.3M 1/4	R211	ERDS2TJ272	2.7K 1/4	R322	ERDS2TJ561	560 1/4
R104	ERDS2TJ273	27K 1/4	R212	ERDS2TJ472	4.7K 1/4	R350	ERDS2TJ221	220 1/4
R105	ERDS2TJ470	47 1/4	R213	ERDS2TJ823	82K 1/4	R501	ERDS2TJ153	15K 1/4
R106	ERDS2TJ122	1.2K 1/4	R214	ERDS2TJ273	27K 1/4	R502	ERDS2TJ123	12K 1/4
R107	ERDS2TJ821	820 1/4	R215	ERDS2TJ222	2.2K 1/4	R503	ERDS2TJ102	1K 1/4
R108	ERDS2TJ152	1.5K 1/4	R216	ERDS2TJ101	100 1/4	R504	ERDS2TJ103	10K 1/4
R109	ERDS2TJ153	15K 1/4	R217	ERDS2TJ223	22K 1/4	R506	ERDS2TJ105	1M 1/4
R110	ERDS2TJ122	1.2K 1/4	R218	ERDS2TJ473	47K 1/4	R507	ERDS2TJ103	10K 1/4
R111	ERDS2TJ272	2.7K 1/4	R219	ERDS2TJ392	3.9K 1/4	CAPACITORS(VALUE, VOLTAGE)		
R112	ERDS2TJ472	4.7K 1/4	R220	ERDS2TJ2R2	2.2 1/4	C2	RCBS1H102KB	0.001 50
R113	ERDS2TJ823	82K 1/4	R221	ERDS2TJ101	100 1/4	C3	RCBC1H4R7KC	4.7P 50
R114	ERDS2TJ273	27K 1/4	R222	ERDS2TJ222	2.2K 1/4	C4	RCBS1H180JC	18P 50
R115	ERDS2TJ222	2.2K 1/4	R224	ERDS2TJ103	10K 1/4	C5	RCBS1H102KB	0.001 50
R116	ERDS2TJ101	100 1/4	R250	ERDS2TJ102	1K 1/4	C6	RCBS1H180JC	18P 50
R117	ERDS2TJ223	22K 1/4	R251	ERDS2TJ103	10K 1/4	C7	RCBS1H180JC	18P 50
R118	ERDS2TJ473	47K 1/4	R252	ERDS2TJ223	22K 1/4	C8	RCBC1H470JL	47P 50
R119	ERDS2TJ392	3.9K 1/4	R253	ERDS2TJ103	10K 1/4	C9	RCBS1H102KB	0.001 50
R120	ERDS2TJ2R2	2.2 1/4	R254	ERDS2TJ223	22K 1/4	C11	RCBS1H102KB	0.001 50
R121	ERDS2TJ101	100 1/4	R255	ERDS2TJ104	100K 1/4	C13	RCBS1H181KB	180P 50
			R256	ERDS2TJ472	4.7K 1/4	C14	ECFT1C223MD	0.022 16
			R257	ERDS2TJ472	4.7K 1/4			

RESISTORS & CAPACITORS**Notes :** * Important safety notice :Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area. (Refer to the first page for area.)

Parts without these indications can be used for all areas.

Numbering System For Resistors**Example:**

ERD	25	F	J	102
Type	Wattage (1/4W)	Shape	Tolerance	Value (1K Ω)
ERX	2	AN	J	471
Type	Wattage (2W)	Shape	Tolerance	Value (470 Ω)

Numbering System For Capacitors**Example:**

ECKD	1H	102	Z	F
Type	Voltage (50V)	Value (0.001 μ F)	Tolerance	Unique
ECEA	50	M		330
Type	Voltage (50V)	Characteristics		Value (33 μ F)

● Capacity values are in microfarads (μ F) unless specified otherwise, P = Pico-farads (pF) F = Farads (F).● Resistance values are in ohms (Ω), unless specified otherwise, 1K = 1,000 Ω , 1M = 1,000k Ω .

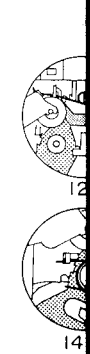
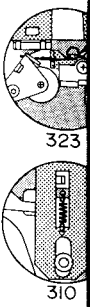
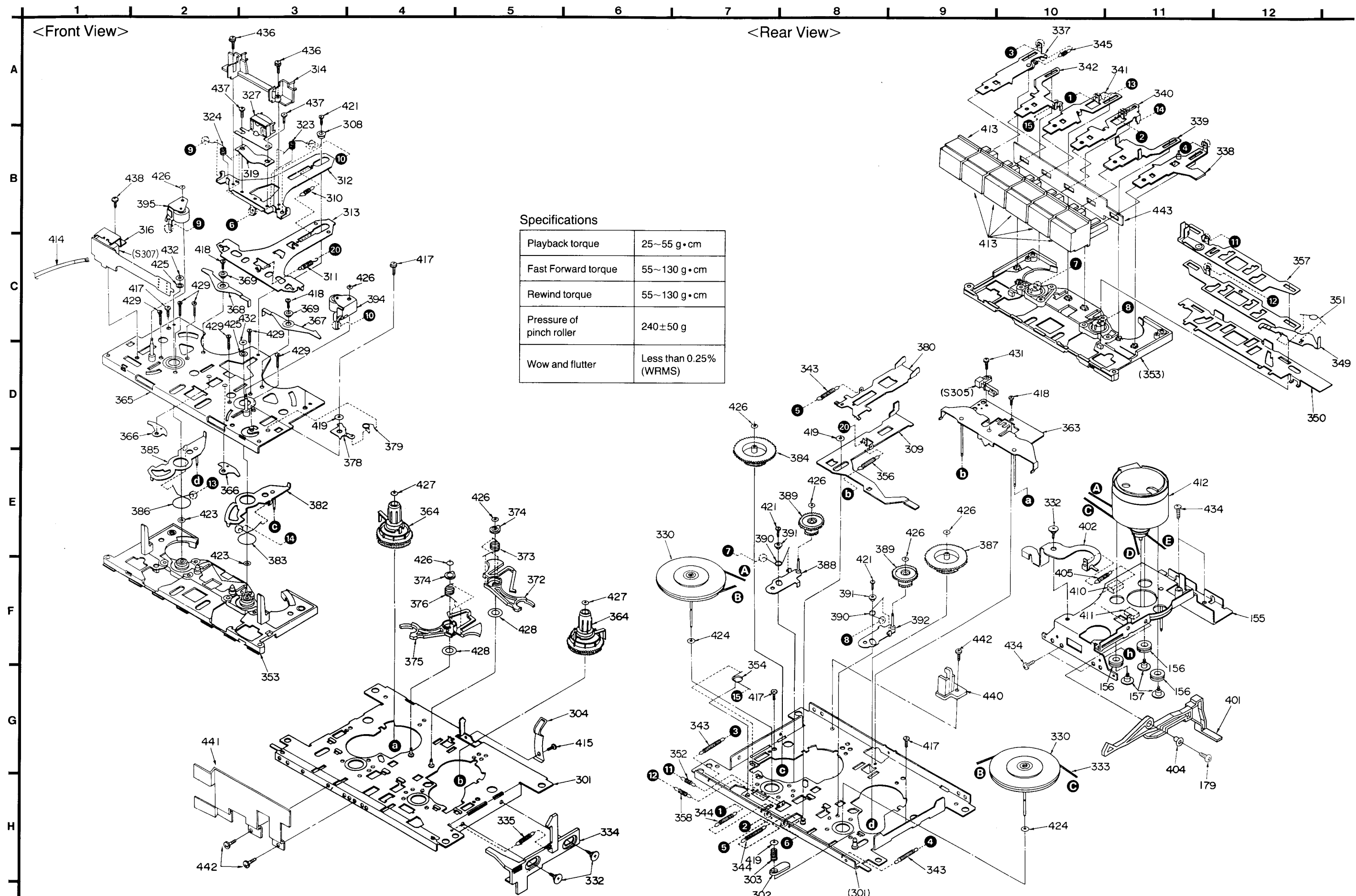
Resistor Type	Wattage		Tolerance
ERD : Carbon	10 : 1/8W	12 : 1/2W	J : $\pm 5\%$
ERG : Metal Oxide	14 : 1/4W	25 : 1/4W	F : $\pm 1\%$
ERQ : Fuse Type Metal	1A : 1W	18 : 1/8W	G : $\pm 2\%$
ERX : Metal Film	S2 : 1/4W	S1 : 1/2W	J : $\pm 5\%$
ERD L : Carbon (chip)	2F : 1/4W	50 : 1/2W	K : $\pm 10\%$
ERO K : Metal Film (chip)	2A : 2W	3A : 3W	M : $\pm 20\%$
ERC : Solid	6G : 1/10W	8G : 1/8W	
ERF : Incumbustible Box-Shaped			
ERM : Wire-Wound			
RRJ : Chip Resistor			
ERJ : Chip Resistor			

Capacitor Type	Voltage		Tolerance
ECE : Electrolytic	0J : 6.3V	1A : 10V	K : $\pm 10\%$
ECCD : Ceramic	1C : 16V	1E : 25V	M : $\pm 20\%$
ECKD : Ceramic Capacitor	1H : 50V	1V : 35V	Z : $\pm 80\%$
EQCM : Polyester	50 : 50V	05 : 50V	-20
ECQP : Polypropylene	2H : 500V	2A : 100V	J : $\pm 5\%$
ECG : Ceramic	1 : 100V	1J : 63V	G : $\pm 2\%$
ECEA N : Non Polar Electrolytic	KC : 400V AC		F : $\pm 1\%$
QCU : Ceramic (Chip Type)	KC : 125V AC		C : $\pm 0.25pF$
ECUX : Ceramic (Chip Type)	(UL)		D : $\pm 0.5pF$
ECF : Semiconductor			
EECW : Liquid electrolyte double layer capacitor			

Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.
C15	RCBC1H331KB	330P 50	C151	ECFV1E683MD	0.068 25	C254	ECFV1C104MD	0.1 16
C16	ECFT1C223MD	0.022 16	C152	ECEA1HU010	1 50	C255	RCBS0J153MY	0.015 6.3
C17	ECEA0JU101B	100 6.3	C153	RCBS1C472MX	0.0047 16	C256	ECEA1HUR33	0.33 50
C18	RCBS1C103MY	0.01 16	C154	ECFV1C104MD	0.1 16	C257	ECEA1HU010	1 50
C19	ECFT1C223MD	0.022 16	C155	RCBS0J153MY	0.015 6.3	C258	RCBS1H471KB	470P 50
C20	ECEA1CU100	10 16	C156	ECEA1HUR33	0.33 50	C259	ECEA1CU100	10 16
C21	RCBS1C103MY	0.01 16	C157	ECEA1HU010	1 50	C260	ECEA1CU100	10 16
C22	ECEA1HU010	1 50	C158	RCBS1H471KB	470P 50	C261	ECEA1HU010	1 50
C23	ECFT1C223MD	0.022 16	C159	ECEA1CU100	10 16	C262	ECEA1HUR22	0.22 50
C24	RCBS1H5R6KC	5.6P 50	C160	ECEA1CU100	10 16	C263	ECFV1E683MD	0.068 25
C26	ECFT1C223MD	0.022 16	C161	ECEA1HU010	1 50	C264	ECEA1HU010	0.1 50
C27	RCBS1C103MY	0.01 16	C162	ECEA1HUR22	0.22 50	C301	ECCT1H181K	180P 50
C28	ECEA1HU010	1 50	C163	ECFV1E683MD	0.068 25	C302	ECEA0JU221	220 6.3
C29	ECEA50ZR47E	0.47 50	C164	ECEA1HU010	1 50	C303	ECFV1E473MD	0.047 25
C30	ECQP2A102JZT	0.001 100	C201	ECEA1HU010	1 50	C304	RCBS1H102KB	0.001 50
C31	ECEA50ZR47E	0.47 50	C202	RCBS1H101KB	100P 50	C305	ECQP1272JZ	0.0027 100
C32	RCBS1H102KB	0.001 50	C203	RCBS1H471KB	470P 50	C306	ECEA1HU010	1 50
C101	ECEA1HU010	1 50	C204	ECFV1C104MD	0.1 16	C307	ECEA0JU221	220 6.3
C102	RCBS1H101KB	100P 50	C205	ECEA1EU47	10 50	C308	ECFV1C104MD	0.1 16
C103	RCBS1H471KB	470P 50	C206	RCBS1H102KB	0.001 50	C309	ECEA0JU471	470 6.3
C104	ECFV1C104MD	0.1 16	C207	ECEA1HU010	1 50	C310	ECEA1CU100	10 16
C105	ECEA1EU47	10 50	C208	RCBS0J153MY	0.015 6.3	C311	ECFT1C223MD	0.022 16
C106	RCBS1H102KB	0.001 50	C209	ECEA0JU470	47 6.3	C312	RCBS1C103MY	0.01 16
C107	ECEA1HU010	1 50	C210	RCBS0J153MY	0.015 6.3	C313	ECEA1EU47	10 50
C108	RCBS0J153MY	0.015 6.3	C211	ECEA1HU010	1 50	C314	ECEA1CU100	10 16
C109	ECEA0JU470	47 6.3	C212	ECFT1C223MD	0.022 16	C315	ECEA0JU221	220 6.3
C110	RCBS0J153MY	0.015 6.3	C213	RCBS1C222MX	0.0022 16	C317	RCBS1C103MY	0.01 16
C111	ECEA1HU010	1 50	C215	ECEA0JU101B	100 6.3	C318	ECEA1AU221	220 10
C113	ECFT1C223MD	0.022 16	C216	RCBS1C103MY	0.01 16	C319	ECEA1CU100	10 16
C114	RCBS1C222MX	0.0022 16	C217	ECEA1EU470	47 10	C320	ECEA1CV221SE	220 16
C115	ECEA0JU101B	100 6.3	C218	ECFV1E473MD	0.047 25	C321	ECEA1CS222	2200 16
C116	RCBS1C103MY	0.01 16	C219	ECEA1AU102	1000 10	C322	ECKD1H103ZF	0.01 50
C117	ECEA1AU470	47 10	C220	ECFV1E473MD	0.047 25	C323	RCBS1H181KB	180P 50
C118	ECFV1E473MD	0.047 25	C221	ECEA1HU010	1 50	C324	ECCT1H181K	180P 50
C119	ECEA1AU102	1000 10	C223	ECFV1C104MD	0.1 16	C350	ECEA0JU471	470 6.3
C120	ECFV1E473MD	0.047 25	C250	RCBS0J223MY	0.022 6.3	C401	ECKD1H103ZF	0.01 50
C121	ECEA1HU010	1 50	C251	ECFV1E683MD	0.068 25	C402	ECKD1H103ZF	0.01 50
C123	ECFV1C104MD	0.1 16	C252	ECEA1HU010	1 50	C501	ECEA1CU330	33 16
C150	RCBS0J223MY	0.022 6.3	C253	RCBS1C472MX	0.0047 16	C502	ECEA1CV221SE	220 16

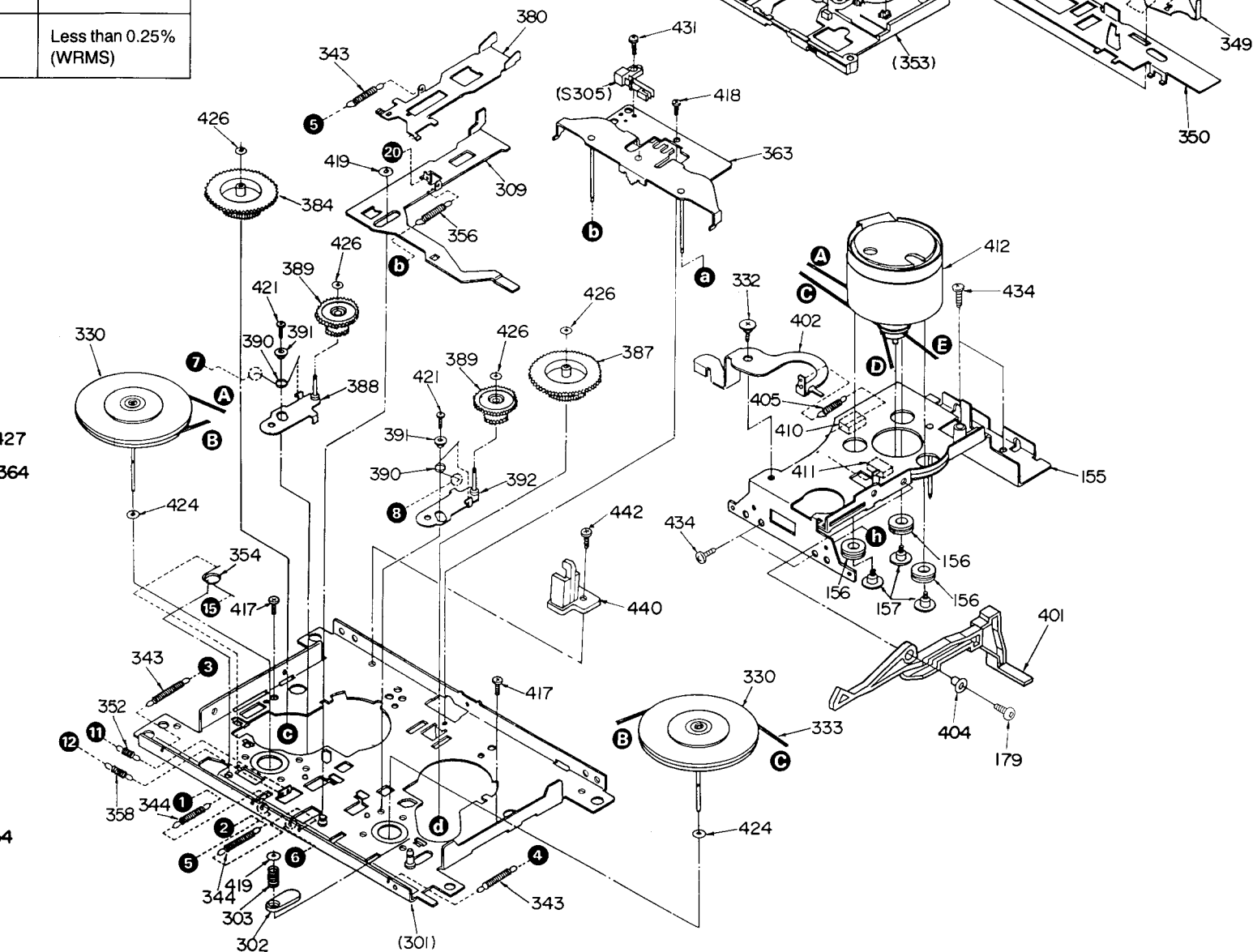
Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.
RESISTORS(VALUE, WATTAGE)			R122	ERDS2TJ222	2.2K 1/4	R258	ERDS2TJ102	1K 1/4
R1	ERDS2TJ220T	22 1/4	R124	ERDS2TJ103	10K 1/4	R301	ERDS2TJ332	3.3K 1/4
R2	ERDS2TJ101	100 1/4	R150	ERDS2TJ102	1K 1/4	R302	ERDS2TJ334	330K 1/4
R3	ERDS2TJ4R7	4.7 1/4	R151	ERDS2TJ103	10K 1/4	R303	ERDS2TJ102	1K 1/4
R5	ERDS2TJ221	220 1/4	R152	ERDS2TJ223	22K 1/4	R304	ERDS2TJ6R8T	6.8 1/4
R7	ERDS2TJ332	3.3K 1/4	R153	ERDS2TJ103	10K 1/4	R305	ERDS2TJ471	470 1/4
R8	ERDS2TJ123	12K 1/4	R154	ERDS2TJ223	22K 1/4	R306	ERDS2TJ561	560 1/4
R9	ERDS2TJ394	390K 1/4	R155	ERDS2TJ104	100K 1/4	R307	ERDS2TJ472	4.7K 1/4
R10	ERDS2TJ560T	56 1/4	R156	ERDS2TJ472	4.7K 1/4	R308	ERDS2TJ332	3.3K 1/4
R11	ERDS2TJ470	47 1/4	R157	ERDS2TJ472	4.7K 1/4	R309	ERDS2TJ562	5.6K 1/4
R12	ERDS2TJ562	5.6K 1/4	R158	ERDS2TJ102	1K 1/4	R310	ERDS2TJ101	100 1/4
R13	ERDS2TJ472	4.7K 1/4	R201	ERDS2TJ473	47K 1/4	R311	ERDS2TJ333	33K 1/4
R14	ERDS2TJ562	5.6K 1/4	R202	ERDS2TJ331	330 1/4	R312	ERDS2TJ104	100K 1/4
R15	ERDS2TJ821	820 1/4	R203	ERDS2TJ335T	3.3M 1/4	R313	ERDS2TJ102	1K 1/4
R16	ERDS2TJ821	820 1/4	R204	ERDS2TJ273	27K 1/4	R314	ERDS2TJ6R8T	6.8 1/4
R17	ERDS2TJ563	56K 1/4	R205	ERDS2TJ470	47 1/4	R315	ERDS2TJ104	100K 1/4
R18	ERDS2TJ102	1K 1/4	R206	ERDS2TJ122	1.2K 1/4	R316	ERDS2TJ680	68 1/4
R19	ERDS2TJ822	8.2K 1/4	R207	ERDS2TJ821	820 1/4	R317	ERDS2TJ335T	3.3M 1/4
R20	ERDS2TJ101	100 1/4	R208	ERDS2TJ152	1.5K 1/4	R319	ERDS2TJ680	68 1/4
R21	ERDS2TJ684	680K 1/4	R209	ERDS2TJ153	15K 1/4	R320	ERDS2TJ471	470 1/4
R101	ERDS2TJ473	47K 1/4	R210	ERDS2TJ122	1.2K 1/4	R321	ERDS2TJ222	2.2K 1/4
R102	ERDS2TJ331	330 1/4	R211	ERDS2TJ272	2.7K 1/4	R322	ERDS2TJ561	560 1/4
R103	ERDS2TJ335T	3.3M 1/4	R212	ERDS2TJ472	4.7K 1/4	R350	ERDS2TJ221	220 1/4
R104	ERDS2TJ273	27K 1/4	R213	ERDS2TJ823	82K 1/4	R501	ERDS2TJ153	15K 1/4
R105	ERDS2TJ470	47 1/4	R214	ERDS2TJ273	27K 1/4	R502	ERDS2TJ123	12K 1/4
R106	ERDS2TJ122	1.2K 1/4	R215	ERDS2TJ222	2.2K 1/4	R503	ERDS2TJ102	1K 1/4
R107	ERDS2TJ821	820 1/4	R216	ERDS2TJ101	100 1/4	R504	ERDS2TJ103	10K 1/4
R108	ERDS2TJ152	1.5K 1/4	R217	ERDS2TJ223	22K 1/4	R506	ERDS2TJ105	1M 1/4
R109	ERDS2TJ153	15K 1/4	R218	ERDS2TJ473	47K 1/4	R507	ERDS2TJ103	10K 1/4
R110	ERDS2TJ122	1.2K 1/4	R219	ERDS2TJ392	3.9K 1/4	CAPACITORS(VALUE, VOLTAGE)		
R111	ERDS2TJ272	2.7K 1/4	R220	ERDS2TJ2R2	2.2 1/4	C2	RCBS1H102KB	0.001 50
R112	ERDS2TJ472	4.7K 1/4	R221	ERDS2TJ101	100 1/4	C3	RCBC1H4R7KC	4.7P 50
R113	ERDS2TJ823	82K 1/4	R222	ERDS2TJ222	2.2K 1/4	C4	RCBS1H180JC	18P 50
R114	ERDS2TJ273	27K 1/4	R224	ERDS2TJ103	10K 1/4	C5	RCBS1H102KB	0.001 50
R115	ERDS2TJ222	2.2K 1/4	R250	ERDS2TJ102	1K 1/4	C6	RCBS1H180JC	18P 50
R116	ERDS2TJ101	100 1/4	R251	ERDS2TJ103	10K 1/4	C7	RCBS1H180JC	18P 50
R117	ERDS2TJ223	22K 1/4	R252	ERDS2TJ223	22K 1/4	C8	RCBC1H470JL	47P 50
R118	ERDS2TJ473	47K 1/4	R253	ERDS2TJ103	10K 1/4	C9	RCBS1H102KB	0.001 50
R119	ERDS2TJ392	3.9K 1/4	R254	ERDS2TJ223	22K 1/4	C11	RCBS1H102KB	0.001 50
R120	ERDS2TJ2R2	2.2 1/4	R255	ERDS2TJ104	100K 1/4	C13	RCBS1H181KB	180P 50
R121	ERDS2TJ101	100 1/4	R256	ERDS2TJ472	4.7K 1/4	C14	ECFT1C223MD	0.022 16
			R257	ERDS2TJ472	4.7K 1/4			

MECHANISM PARTS LOCATION • TAPE 1 (For Playback/Auto Reverse)



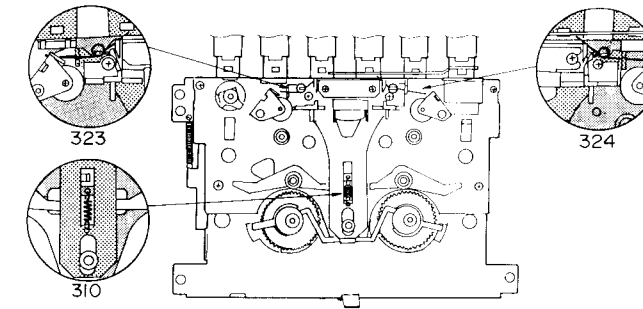
<Rear View>

	25~55 g • cm
e	55~130 g • cm
	55~130 g • cm
	240±50 g
	Less than 0.25% (WRMS)

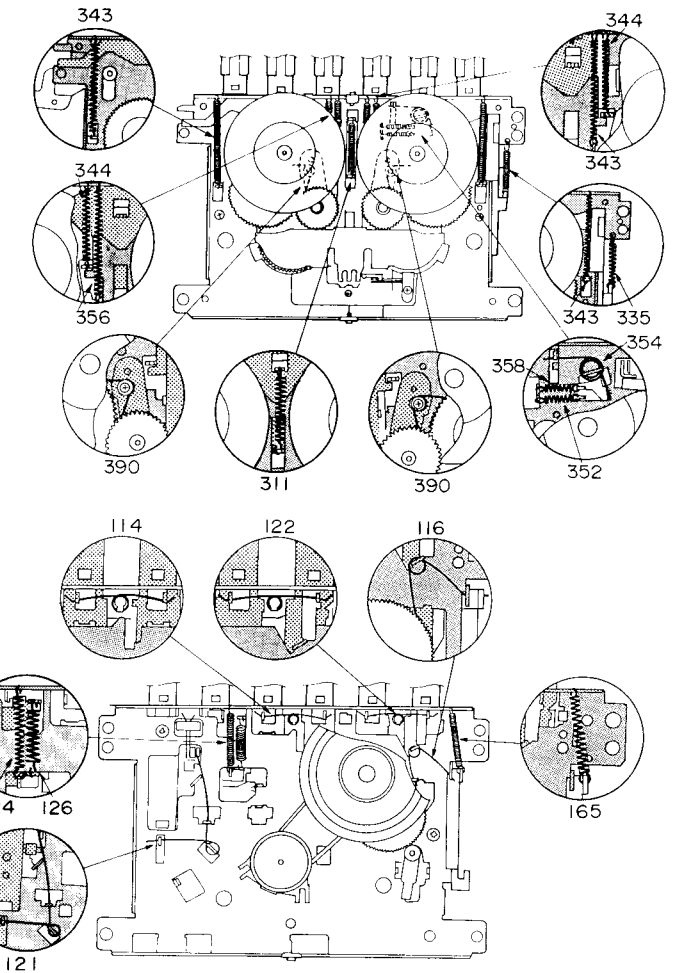
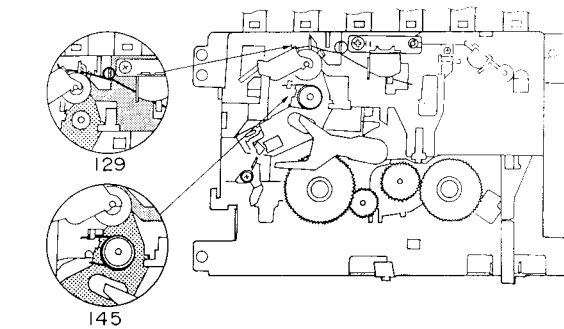


■ SPRING LOCATION

<TAPE 1>



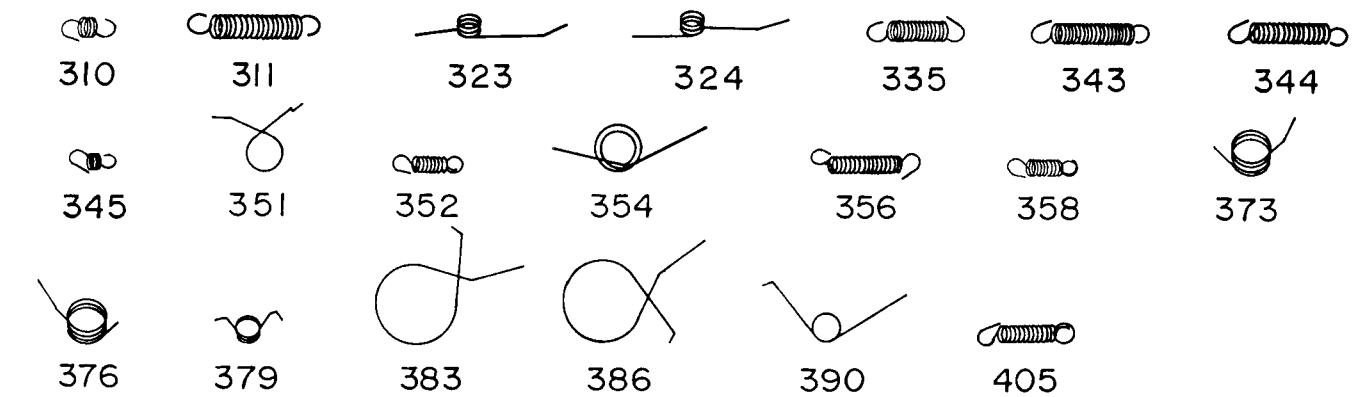
<TAPE 2>



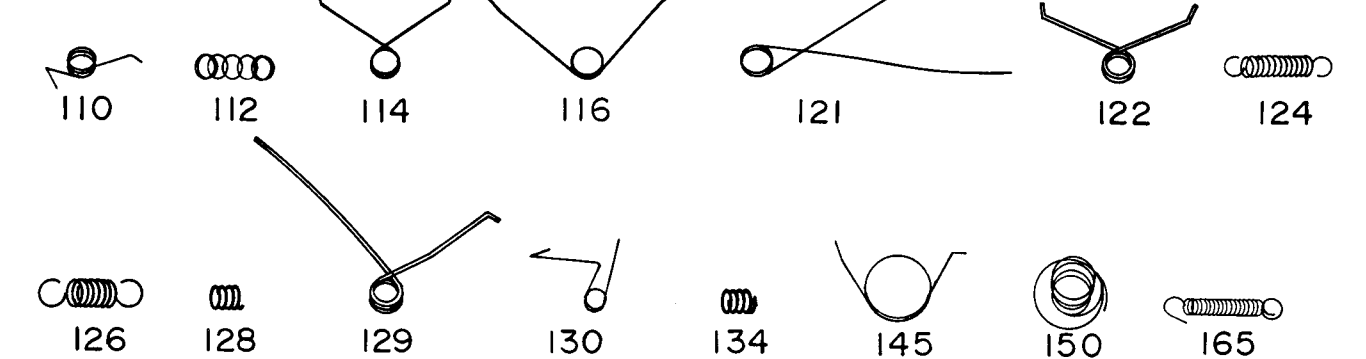
■ SPRING ILLUSTRATION

The illustration shows the actual size of the springs so it can be used to check their shapes.
(The illustration shows the springs separated from the mechanism).

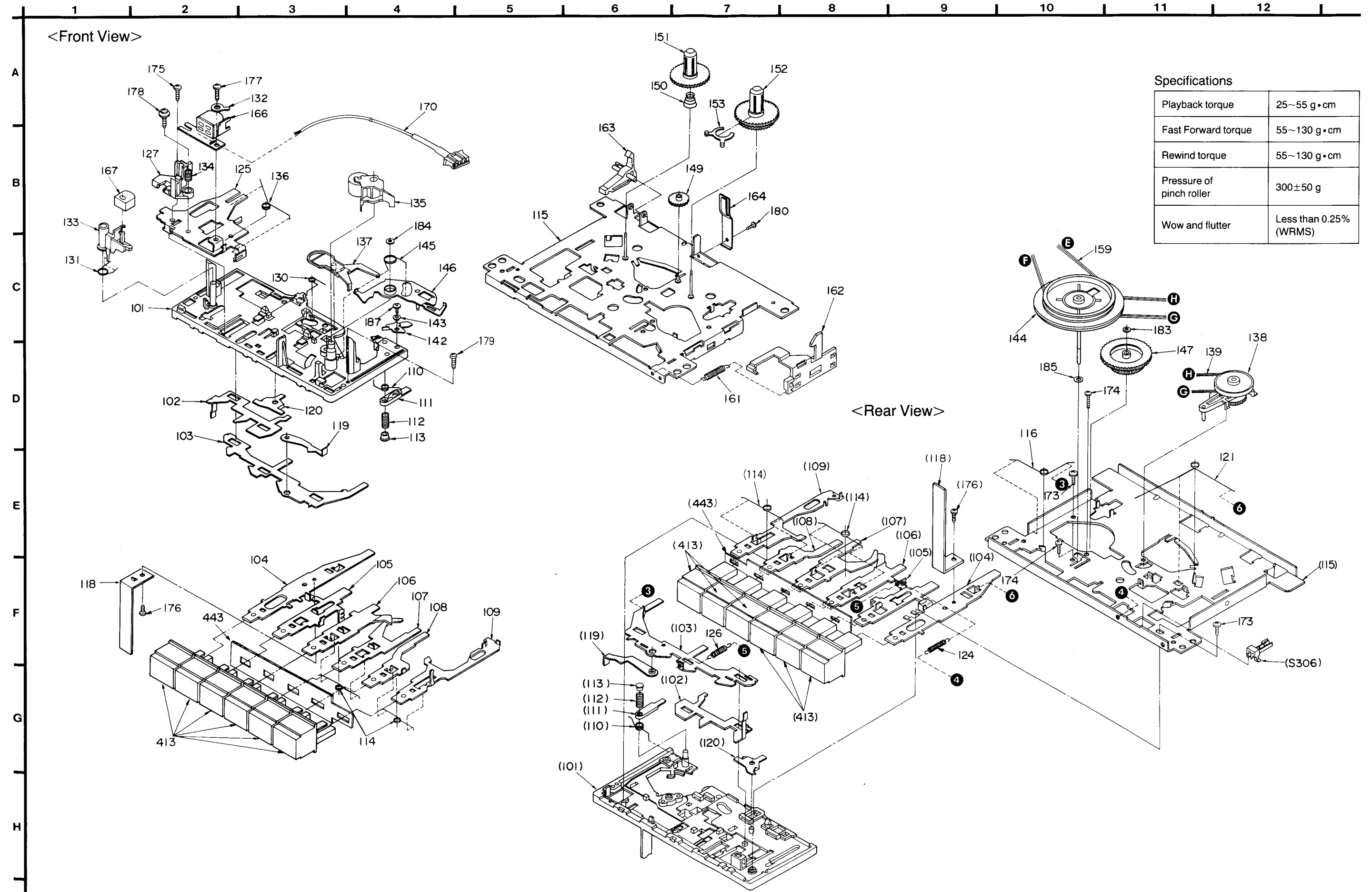
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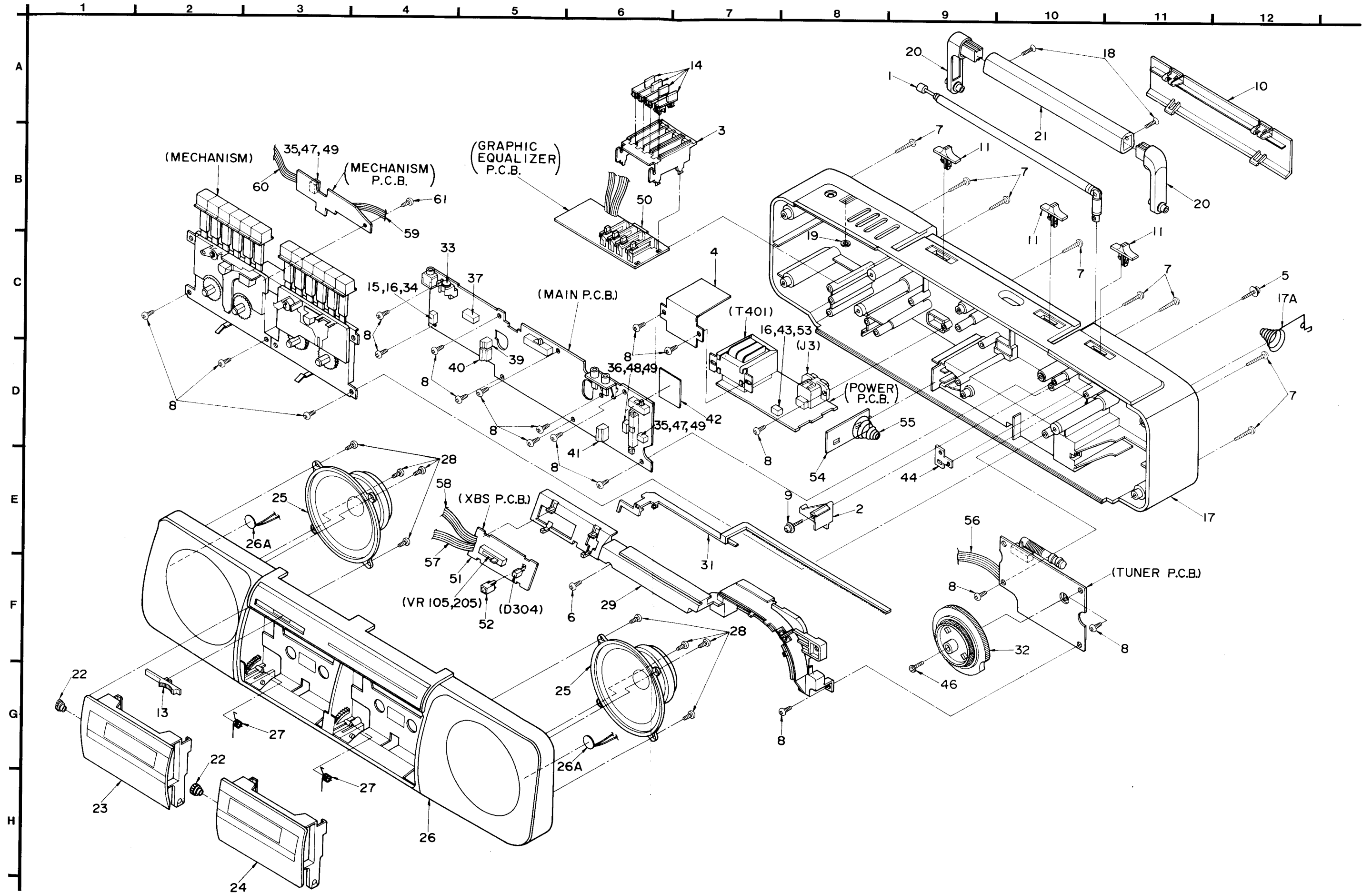
<TAPE 2>



MECHANISM PARTS LOCATION • TAPE 2 (For Recording and Playback)



CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Notes : * Important safety notice :
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area. (Refer to the first page for area.)
Parts without these indications can be used for all areas.
* $\overline{M}$ Indicates parts that are supplied by MESA.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
INTEGRATED CIRCUITS			VR105	EWAMASX05B54	V.R. XBS LEVEL $\overline{M}$
IC1	AN7205	I.C. FM FRONT END	VR201	EWAGQ6T50G54	V.R. G. E.Q.(10KH) $\overline{M}$
IC2	BA4236L	I.C. IF AMP. DET.	VR202	EWAGQ6T50G54	V.R. G. E.Q.(1KH) $\overline{M}$
IC3	RV1BA1332L	I.C. FM MPX	VR203	EWAGQ6T50G54	V.R. G. E.Q.(330H) $\overline{M}$
IC301	AN7312	I.C. PRE AMP	VR204	EWAGF2T50B54	V.R. VOLUME $\overline{M}$
IC302	LA4108R	I.C. POWER AMP	VR205	EWAMASX05B54	V.R. XBS LEVEL $\overline{M}$
IC303	AN7330K	I.C. G.E.Q. AMP	VR501	EVND4AA00B53	V.R. TAPE SPEED
TRANSISTORS			VARIABLE CAPACITORS		
Q101	2SC1685-Q	TRANSISTOR	VC1	RCV4PCTOV1-M	V.C. $\overline{M}$
Q102	2SC1685-Q	TRANSISTOR	COILS AND TRANSFORMERS		
Q103	2SC1685-Q	TRANSISTOR	L2	RLD4Y53	COIL
Q104	2SC1685-Q	TRANSISTOR	L3	RLF2C70-0	BAR ANTENNA $\overline{M}$
Q201	2SC1685-Q	TRANSISTOR	L4	RL02B105	COIL
Q202	2SC1685-Q	TRANSISTOR	L101	RLQZP1R0KT-Y	COIL
Q203	2SC1685-Q	TRANSISTOR	L201	RLQZP1R0KT-Y	COIL
Q204	2SC1685-Q	TRANSISTOR	L301	RL09B17	COIL
Q301	2SC1685-Q	TRANSISTOR	T1	RLI4B153	I.F. TRANSFORMER
Q302	2SC1685-Q	TRANSISTOR	T2	RLI2B458	I.F. TRANSFORMER
Q303	2SA722-S	TRANSISTOR	T3	RLI4B153	I.F. TRANSFORMER
Q304	2SC1685-Q	TRANSISTOR	T401	RLT5K3C10A-X	POWER TRANSFORMER $\overline{M}$
Q305	2SC2001K1	TRANSISTOR	COMPONENT COMBINATIONS		
Q501	2SK301QTA	TRANSISTOR $\overline{M}$	Z1	RXABPMB6A	COMPONENT COMBINATION
Q502	2SC1685-Q	TRANSISTOR	FILTERS		
DIODES			CF1	RVF107WDZ	CERAMIC FILTER
D1	RVD1SS133	DIODE	CF2	RVF455RB-D	FILTER $\overline{M}$
D301	RVD1SS133	DIODE	SWITCHES		
D302	RVDMTZ6R8B	DIODE	S1	RSS3B45XA-H	SW. BAND $\overline{M}$
D303	RVD1SS133	DIODE	S301	RSS3B45XA-H	SW. EDIT MODE/B.P. $\overline{M}$
D304	RVDSLB55VR	DIODE	S302	RSH2F18ZA-A	SW. RECORD
D401	RVD1SR35	DIODE	S303	RSS3D30ZA-H	SW. SELECTOR $\overline{M}$
D402	RVD1SR35	DIODE	S305	RFA92ZA	SW. MOTOR(TAPE 1)
VARIABLE RESISTORS			S306	RFA85ZA	SW. MOTOR(TAPE 2)
VR1	RVNCA14B1T-A	V.R. FM VCO $\overline{M}$	S307	RFA63Z	SW. FWD/REV
VR101	EWAGQ6T50G54	V.R. GRAPHIC E.Q.(10KH) $\overline{M}$	OTHERS		
VR102	EWAGQ6T50G54	V.R. GRAPHIC E.Q.(1KH) $\overline{M}$	J1	RJF1099Z	JACK, CD/LINE IN
VR103	EWAGQ6T50G54	V.R. GRAPHIC E.Q.(330H) $\overline{M}$	J2	RJJD7S2Z	JACK, HEADPHONES
VR104	EWAGF2T50B54	V.R. VOLUME $\overline{M}$	J3	RJJ1A3Y	JACK W/SW. AC IN (S304)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
PACKING MATERIAL			P3	RPK2799ZA	GIFT BOX $\overline{M}$
P1	RPK658ZB	PROTECTION BAG $\overline{M}$	ACCESSORIES		
P2	RPN9584ZA	PAD $\overline{M}$	A1	RJA22X	POWER CORD Δ
			A2	RQX5205ZA	INST. MANUAL $\overline{M}$

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
MECHANISM			310	RFS736ZA	SPRING
CASSETTE DECK			311	RFS833ZA	SPRING
101	RFU154ZA	CHASSIS ASS'Y	312	RFY817ZA	HEAD PANEL
102	RFY866ZA	PLATE	313	RFY818ZA	PLATE
103	RFY867ZA	PLATE	314	RFE417ZA	GUIDE
104	RFY866ZA	LEVER	316	RFD334ZA	ANGLE
105	RFY912ZA	LEVER	319	RFS737ZA	SPRING
106	RFY897ZA	LEVER	323	RFS751ZA	SPRING
107	RFY888ZA	LEVER	324	RFS752ZA	SPRING
108	RFY899ZA	LEVER	327	1JH0027ZA	P HEAD $\overline{M}$
109	RFY901ZA	LEVER	330	RFF68ZA	FLYWHEEL ASS'Y
110	RFS837ZA	SPRING	332	RFE239Z	SCREW
111	RFG139ZA	LEVER	333	RFB90ZA	BELT
112	RFS813ZA	SPRING	334	RFY800ZA	LEVER
113	RFX174ZA	STOPPER	335	RFS726ZA	SPRING
114	RFS814ZA	SPRING	337	RFY812ZA	LEVER
115	RFU155ZA	CHASSIS ASS'Y	338	RFY857ZA	LEVER
116	RFS815ZA	SPRING	339	RFY808ZA	LEVER
118	RFS799ZA	SPRING	340	RFY809ZA	LEVER
119	RFY844ZA	LEVER	341	RFY810ZA	LEVER
120	RFX175ZA	STOPPER	342	RFY811ZA	LEVER
121	RFS835ZA	SPRING	343	RFS834ZA	SPRING
124	RFS843ZA	SPRING	344	RFS732ZA	SPRING
125	RFU166ZA	PLATE	345	RFS733ZA	SPRING
126	RFS844ZA	SPRING	349	RFY914ZA	LEVER
127	RFU167ZA	HEAD BASE	350	RFY804ZA	PLATE
130	RFS820ZA	SPRING	351	RFS730ZA	SPRING
131	RFS821ZA	SPRING	352	RFS748ZA	SPRING
132	RFE504ZA	TERMINAL	353	RFU130ZA	CHASSIS ASS'Y
133	RFY913ZA	ARM	354	RFS734ZA	SPRING
134	RFS447Z	SPRING	356	RFS750ZA	SPRING
135	RFR58ZA	PINCH ROLLER ASS'Y	357	RFY806ZA	PLATE
136	RFS845ZA	SPRING	358	RFS747ZA	SPRING
137	RFY884ZA	LEVER	363	RFU131ZA	PLATE ASS'Y
138	RFG61ZA	CLUTCH ASS'Y	364	RFJ87ZA	REEL TABLE
139	RFB99ZA	BELT	365	RFU129ZA	SUB CHASSIS ASS'Y
142	RFD396ZA	ARM	366	RFY823ZA	ARM
143	RFY877ZA	COLLAR	367	RFY815ZA	ARM
144	RFF69ZA	FLYWHEEL ASS'Y	368	RFY816ZA	ARM
145	RFS822ZA	SPRING	369	RFX162ZA	COLLAR
146	RFY874ZA	PLATE ASS'Y	372	RFY798ZA	LEVER
147	RFG136ZA	CAM GEAR	373	RFS724ZA	SPRING
149	RFG110ZA	GEAR	374	RFX161ZA	STOPPER
150	RFS838ZA	SPRING	375	RFY799ZA	LEVER
151	RFJ89ZA	REEL ASS'Y $\overline{M}$	376	RFS725ZA	SPRING
152	RFJ90ZA	REEL ASS'Y $\overline{M}$	378	RFY801ZA	ARM
153	RFY875ZA	SENER	379	RFS727ZA	SPRING
155	RFD387ZA	BRACKET	380	RFY814ZA	PLATE
156	RFI38Z	RUBBER	382	RFY802ZA	ARM ASS'Y
157	RFE507ZA	SCREW	383	RFS728ZA	SPRING
159	RFB103ZA	BELT	384	RFG111ZA	GEAR
161	RFS826ZA	SPRING	385	RFY803ZA	ARM (R) ASS'Y
162	RFY889ZA	LEVER	386	RFS729ZA	SPRING
163	RFY716Z	LEVER	387	RFG112ZA	GEAR
164	RFS534Z	SPRING	388	RFY819ZA	ARM ASS'Y
166	RBR4CG003-M	R/P HEAD $\overline{M}$	389	RFG113ZA	GEAR
167	RBR2CY001-1	E.HEAD	390	RFS740ZA	SPRING
170	RZZ0417	SHIELD WIRE	391	RFX164ZA	COLLAR
173	RFE416ZA	SCREW	392	RFY820ZA	ARM ASS'Y
174	RFE496ZA	SCREW	394	RFR46ZA	PINCH ROLLER ASS'Y
175	RFE476ZA	SCREW	395	RFR47ZA	PINCH ROLLER ASS'Y
176	RFE484ZA	SCREW	401	RFY582Z	LEVER
177	RFE498ZA	SCREW	402	RFY821ZA	LEVER
178	RFE230Z	SCREW	404	RFX134Z	COLLAR
179	RFE252Z	SCREW	405	RFS741ZA	SPRING
180	RFE420ZA	SCREW	410	RFI50ZA	CUSHION
183	RFNR3Z	WASHER	411	RFI57ZA	CUSHION
184	RFN214ZA	WASHER	412	RFM163ZA	MOTOR
185	RFN122Z	WASHER	413	RBC1397ZA-0	BUTTON $\overline{M}$
187	RFE497ZA	SCREW	414	RZZ0416	SHIELD WIRE
301	RFU128ZA	CHASSIS ASS'Y	415	RFE420ZA	SCREW
302	RFY420Z	LEVER	417	RFE222Z	SCREW
303	RFS459Z	SPRING	418	RFE426ZA	SCREW
304	RFS534Z	SPRING	419	RFN134Z	WASHER
308	RFX163ZA	COLLAR	421	RFE423ZA	SCREW
309	RFY813ZA	PLATE	423	RFN122Z	WASHER
			424	RFN136Z	WASHER

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
425	RFN182ZA	WASHER	434	RFE425ZA	SCREW
426	RFN133Z	WASHER	436	RFE422ZA	SCREW
427	RFN139Z	WASHER	437	RFE431ZA	SCREW
428	RFN183ZA	WASHER	438	RFE421ZA	SCREW
429	RFE503ZA	SCREW	440	RUE83ZA	HOLDER M
431	RFE473ZA	SCREW	441	RMC3SZA	SHIELD PLATE
432	RFN216ZA	WASHER	442	XTN2*4F	SCREW
			443	RHR3070ZCB	SPACER M

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
CABINET AND CHASSIS			29	RUA876ZA-0	CHASSIS M
1	XEARR225DAY	TELESCOPIC ANTENNA	31	RDP358ZA-0	POINTER
2	RUB564ZA	LEVER M	32	RBT328ZA-0	KNOB
3	RUV837ZB	CHASSIS M	33	RJM164YA	MICROPHONE M
4	RMC1246ZA	SHIELD PLATE M	34	RJP3G4Y	CONNECTOR (3P)
5	XYN3*F10FY	SCREW	35	RJP4G18ZA	CONNECTOR (4P)
6	XTN3*12G	SCREW	36	RJP5G18Z	CONNECTOR (5P)
7	XTN3*20G	SCREW	37	RJP7G11Z	CONNECTOR (7P)
8	XTV3*12G	SCREW	39	SJT30243-V	CONNECTOR
9	XTW3*25Q	SCREW	40	SJT30443-V	CONNECTOR
10	RKK318ZD-0	BATTERY COVER M	41	SJT30543-V	CONTACT
11	RBD563ZA-0	KNOB M	42	RMC228ZA	SHIELD PLATE M
13	RBD565ZA-0	KNOB M	43	RJS2L3Z	SOCKET(2P)
14	RBD566ZA-0	KNOB M	44	RUP2532ZAC	P.C.B
15	RJS3L3Z	SOCKET(3P)	46	XYN26*C6	SCREW
16	RJT707Z	CONTACT	47	RJS4L4Z	SOCKET(4P)
17	RYFXFT550PKS	REAR CABINET ASS'Y	48	RJS5L4Z	SOCKET(5P)
17A	RJC931Z	BATTERY TERMINAL (+/-)	49	RJT807ZB-X	CONTACT
18	XTC3*10CFN	SCREW	50	RJS7M3Z	SOCKET (7P)
19	RHG1244ZA	RUBBER M	51	RUP2526ZAC	P.C.B M
20	RKX402ZA-0	ARM M	52	RMP287ZA	LED HOLDER M
21	RKX403ZA-0	HANDLE M	53	RJP2G4Y	CONNECTOR(2P)
22	RDG5874ZB	GEAR	54	RUP2528YAC	P.C.B
23	RYQ1XFT550JK	CASSETTE LID ASS'Y M	55	RJC511Z	BATTERY SPRING
24	RYQ2XFT550JK	CASSETTE LID ASS'Y M	56	WBB5AB-17KM	FLAT CABLE
25	RAS10P35ZA-H	SPEAKER	57	WBB3GB-20KK	FLAT CABLE
26	RYMXFT550PKS	FRONT CABINET ASS'Y	58	WBB4GB-20KK	FLAT CABLE
26A	RAF12E4A01-K	TWEETER M	59	WBB4AB-6K	FLAT CABLE
27	RUM4SZB	SPRING	60	WBB4AB-8KM	FLAT CABLE
28	XTV3*8G	SCREW	61	XTN2*4F	SCREW